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An assessment of incorporating quantified  
contract administration functions in use at  
Navy Field Contracting Activities into the  
Navy's Productive Unit Resource (PUR) system

Baker, James Mark

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# NAVAL POSTGRADUATE SCHOOL

## Monterey, California



# THESIS

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AN ASSESSMENT OF INCORPORATING QUANTIFIED  
CONTRACT ADMINISTRATION FUNCTIONS IN USE  
AT NAVY FIELD CONTRACTING ACTIVITIES INTO  
THE NAVY'S PRODUCTIVE UNIT RESOURCING  
(PUR) SYSTEM

by

James Mark Baker

June 1989

Thesis Advisor:

E.N. Hart

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An Assessment of Incorporating Quantified Contract  
Administration Functions in Use at Navy Field  
Contracting Activities into the Navy's  
Productive Unit Resourcing (PUR) System

by

James Mark Baker  
Lieutenant Commander, United States Navy  
B.A., University of Rochester, 1977

Submitted in partial fulfillment of the  
requirements for the degree of

MASTER OF SCIENCE IN MANAGEMENT

from the

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June 1989

## ABSTRACT

The primary objective of this thesis was to determine the feasibility of modifying the Productive Unit Resourcing (PUR) model to accurately reflect contract administration functions performed at the Navy Field Contracting Activities (NFCAs). Data concerning contract administration functions were collected from NFCAs and analyzed in three ways: by the percent of contracts affected, the number of labor hours expended per contract, and the percent of the total contract administration workload expended per function. The analysis revealed that NFCAs applied subjective interpretations to the contract administration functions, and did not have a credible historical database from which to gather their data. Large deviation factors between the NFCAs were documented. From the data collected, contract administration functions could not be quantified or standardized. It is currently not feasible to modify the PUR model in a manner that would accurately reflect the contract administration functions performed at NFCAs.

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## I. INTRODUCTION

### A. GENERAL

Productivity is a cornerstone of most business organizations. Business programs, policies, goals and strategies are all influenced by productivity, which has become synonymous with efficiency and financial survival. While productivity is a basic integral factor in most business ventures, the actual measurement of productivity is a complex issue that is constantly addressed in the business environment.

One area of productivity that has been closely examined has been that of personnel resources. Even as society evolves and the business world becomes more complex, organizations are still faced with the basic question of "How does the organization determine, in financial terms, the productivity of its personnel?" The wide variety of answers to this question reflects the diverse organization structures in existence today. Old concepts are constantly being updated and modified to account for the dynamic business environment.

Many large businesses face the problem of deciding whether to develop a new "state of the art" concept, or to develop a process that is already in use by a similar business organization. One organization that continuously faces this dilemma is the United States Navy. The United States Navy is

increasingly reviewing private business practices to see what could be beneficially incorporated into its organization. The Navy has realized that private enterprise has much to offer in terms of efficiency and productivity, especially during periods of frugal defense spending.

This research study reviews one business concept that a major command in the United States Navy has attempted to address. The Naval Supply Systems Command (NAVSUP) has developed a program called the Productive Unit Resourcing (PUR). The goal of PUR is to relate budget estimates to actual production results at the lower echelon commands, specifically the Navy Field Contracting Activities (NFCAs) within the Navy Field Contracting System. PUR is an attempt to run the NFCAs in a more businesslike manner, with "salaries paid" directly linked to "production completed." While there are many facets to the PUR model, this study will only concentrate on its relationship to the contract administration workload for large purchases.

## B. OBJECTIVES

The primary objective of this thesis is to review the PUR system and determine if it can be modified to more accurately reflect the contract administration workload performed at NFCAs. Secondary objectives include identifying quantifiable contract administration functions that are performed at NFCAs, and determining if trends exist for these functions amongst

the NFCAs. And finally, recommendations will be made as to the feasibility of collecting data that can be used to quantify contract administration functions for incorporation into the PUR model.

#### C. RESEARCH QUESTIONS

To complete the objectives, fundamental research questions were prepared. The primary research question is: Is it feasible to develop a standardized PUR model that accurately reflects the contract administration functions performed at NFCAs?

In support of the primary question, the following secondary questions will be addressed:

1. What contract administration functions can be effectively quantified and recorded?
2. Do these quantifiable contract administration functions exhibit significant correlations amongst the NFCAs?

#### D. RESEARCH METHODOLOGY

Research data were collected primarily from two sources. An in-depth literature search was conducted, which included a custom bibliography from the Defense Logistics Study Information Exchange (DLSIE), published and unpublished papers, and Government publications and reports. Key indicators used included Manpower Management, Manpower Requirements, Personnel Management, Personnel Resourcing, Resource Management and Productivity Measurement.



The literary search proved to be useful in providing only a minimum amount of background information, and was not of great value towards quantifying and collecting data on contract administration functions.

For this, a second research source was used. Appendices A-C were used to collect raw data in regards to contract administration functions. Feedback from this questionnaire represented the majority of the research efforts, from which the analyses and findings were based.

Questionnaire participants were extremely cooperative and supportive, and provided invaluable assistance to the research efforts. Appendix D contains a list of the personnel that were instrumental in getting the questionnaire completed and returned in a timely manner.

#### E. SCOPE OF STUDY

This study concentrates on two major areas. First, how PUR is supposed to be used by NFCAs. This basically entails a general background of the PUR model, without focusing on any particular command.

Second, data accumulated from NFCAs concerning contract administration functions will be analyzed. These data represent six Navy Supply Centers (NSCs) and three Navy Regional Contracting Centers (NRCCs) in the continental United States. Data trends will be identified, the feasibility of

modifying the PUR model addressed, and recommendations given as to possible follow-on research areas.

#### F. ORGANIZATION OF STUDY

This study consists of five chapters. Chapter I has provided a general introduction of the research topic, the objectives to be reached, the methodology used and the scope of the study.

Chapter II gives a more in-depth background of the PUR program, and provides a detailed account of the alleged adverse impact that the PUR model may have on contract administration workloads.

Chapter III documents the evolution of the thesis questionnaire, and states the reasoning behind, and the objectives of, the questionnaire. Problems encountered will be described, along with the courses of action taken.

Chapter IV discusses the data collected. The reasoning and assumptions made to collect and record the data in a presentable manner will be reviewed. Headings for key data tables will be explained. Significant data trends will be identified, and alternative interpretations of the data given.

Chapter V summarizes the results of the research, and presents conclusions and recommendations. The recommendations will highlight possible changes to the current PUR model, as well as additional follow-on research areas.

Appendices and List of References are provided to assist further research efforts.

## II. BACKGROUND

### A. PRE-PUR

Prior to the PUR program, the Naval Supply Systems Command (NAVSUP) allocated financial resources to the NFCAs using an incremental funding methodology, which is also called a workyear-cost funding methodology. Financial allocations were based on the previous year allocations. Budget submissions from NFCAs therefore started with the previous year's allocations as the base amount, and justified any changes (usually increases) from that amount. The NFCAs were not required to justify the entire amount, as would be required if a "zero base" funding approach had been used.

PUR was developed in the mid-1980's in order to fund NFCAs based on the actual amount of work performed, with the budget not being tied to last year's allocations. The PUR model requires each NFCA to calculate and justify its budget from the ground up, and does not permit an incremental funding methodology.

PUR guidance is provided in NAVSUP INSTRUCTION 7000.21A of 12 December 1986. The instruction applies to the eight NSCs, four NRCCs, Aviation Supply Office (ASO), Ships Parts Control Center (SPCC), Naval Publications and Forms Center (NPFC), and the Navy Regional Finance Center in Washington, D.C. The

remaining NAVSUP field activities receive budget guidance individually [Ref. 1:p. 1].

#### B. WHAT IS PUR?

Morris [Ref. 2:p. 1] states that PUR is a method of funding an activity's workload by establishing a measurable unit of output (productive unit), dividing total costs of the workload by the number of productive units to obtain a productive unit rate, and multiplying the estimated future annual productive units by the productive unit rate to determine the total annual funding budget required. Each budget request is therefore based on the forecasted workload, and does not rely on previous fiscal year budgets.

#### C. MECHANICS OF PUR

##### 1. Reporting Procedures

Prior to each fiscal year, NAVSUP will meet with each NFCA to negotiate the productive unit rate for the upcoming fiscal year. It is during these negotiations that an NFCA highlights unique requirements and states estimated workload increases, in order to obtain a higher productive unit rate. Once the unit rate is negotiated, NAVSUP issues each activity its Financial Operating Plan (FOP) letter, which documents what the productive unit rate and the projected total productive units will be for the fiscal year. Upon receiving the FOP each NFCA will submit to NAVSUP a financial execution plan that identifies by cost center the monthly anticipated

workloads and costs. This execution plan is called the Phasing Plan [Ref. 2;p. 16].

## 2. Cost Center

The cost center is a key component of the reporting procedure, for NAVSUP Cost Center Managers (CCM) on a monthly basis compare the actual workload to the forecasted productivity for each cost center. The CCM receives assistance from a Technical Manager in regards to quality of performance of the NFCA cost center [Ref. 1;p. 8]. The third key PUR player at NAVSUP is the Comptroller, who issues the FOP.

Of the 15 cost centers identified in NAVSUPINST 7000.21A, this study looks only at the Procurement Cost Center. NAVSUPINST 7000.21A defines the Procurement Cost Center as:

The Procurement Cost Center will resource all O&M,N labor and non-labor costs incurred by an activity in providing procurement services. It will be funded on the basis of large and small purchase productive unit cost rates multiplied by projected workload. Additions and withdrawals will be based on actual quarterly completions. [Ref. 1:Encl. (3)]

Costs are recorded in specific cost accounts for each cost center. Cost accounts assigned to the Procurement Cost Center include:

Category Description	Cost Account (C/A).
1. Large Purchase Buying	271A.
2. Small Purchase Buying	271B.
3. Contract Administration	271C.

4. Purchase Administration 271D.

5. Procurement Overhead 271E.

3. Algorithms and Productive Units

NAVSUPINST 7000.21A uses the following algorithms, in conjunction with cost account costs, to derive productive units and overhead allocations for large purchases.

a. Overhead Allocated to Large Purchase

$$P = \text{Procurement Overhead} = \frac{271A + 271C}{271A + 271B + 271C + 271D} \times 271E \quad (2.1)$$

b. Large Purchase Cost Per Productive Unit

$$\text{COST PER PRODUCTIVE UNIT} = \frac{L + C + P}{A} \quad (2.2)$$

where:

L = Total large purchase O&M,N labor and non-labor recorded in C/A 271A.

C = Total contract administration O&M,N labor and non-labor recorded in C/A 271C.

P = Overhead allocated to large purchase (Formula 2.1).

A = Total productive units reported in the Procurement Management Reporting System (PMRS) report DF106.

PMRS is the management information system that reports all procurement actions to NAVSUP. The computer program DF106 receives the data from the NFCAs, and calculates

the productive units. The Large Purchase Productive Unit Matrix is displayed in Appendix E.

#### D. PUR OBJECTIVES

As outlined in Fink [Ref. 3:p.9], PUR was established with five basic objectives in mind. First, PUR would provide NAVSUP a better way to measure the workload-funding-productivity relationship. Second, PUR would provide NAVSUP an evaluation criterion for monitoring the performance of an activity, by being able to compare actual productivity/costs to planned productivity/costs. Third, funding would be related to the completion of key Strategic Plan objectives. Fourth, stellar employee performance would be acknowledged and rewarded in an objective manner. Fifth, increased output by an activity would generate additional funding for the activity, without the activity having to go through the process of requesting additional funding from NAVSUP.

#### E. PUR AND CONTRACT ADMINISTRATION

After reviewing the fundamental procedures of the PUR program, it is now appropriate to narrow our discussion to the relationship between PUR and the contract administration workload.

Let us start our discussion by first examining how NFCAs receive additional funding, called profits, which can be passed on as bonuses to employees that have maintained or increased high productivity standards. Figure 2.1, reproduced



from NAVSUPINST 7000.21A, shows how funds may be increased (or decreased) to an NFCA.

	ACTUAL PRODUCTIVE UNITS GENERATED	
	HIGHER <sup>1</sup>	LOWER <sup>1</sup>
HIGHER <sup>1</sup>	* Additional Units Paid for at Plan/Neg. Rate Rate	* Funds for Lapsed Units Recaptured at Plan/Neg. Rate
ACTUAL PRODUCTIVE UNIT RATE	* No Profit Sharing	* No Profit Sharing
LOWER <sup>1</sup>	* Additional Units Paid at Actual Rate	* Funds for Lapsed Units Recaptured at Plan/Neg Rate
	* Profit Sharing Based On Approved Ratio for Planned Units	* Profit Sharing Based on Approved Ratio for Actual Units

<sup>1</sup> Relative to Plan/Neg Level

Figure 2.1. Profit/Loss Scenario

As can be observed, profit sharing occurs when the NFCA lowers its actual productive unit rate while generating higher productive units. How does an NFCA achieve this? A review of Appendix E shows that for large purchase organizations accumulating productive units is directly linked to awarding a contract. While there are ways to game the system (i.e., process delivery orders in volume), the bottom line is that productive units are directly related to the negotiating/buying/purchasing side of contracting, and not necessarily to contract administration efforts. When initially established,

PUR recognized only completed actions, and not time consuming contract administration functions, e.g., cancellations and terminations.

In 1988, NAVSUP contracted Ellsworth Associates, Inc. (EAI) to conduct a study of the NAVSUP PUR system. While the study covered many facets of the PUR system, EAI specifically examined the impact that PUR had on contract administration. EAI concluded that:

There exist significant indications that contract and purchase administration and the quality of procurement have been adversely effected since the inception of PUR. This conclusion is based on the evidence of a decrease in the ratio of hours spent in contract administration to total operations, and an increasing trend in modifications and correcting actions as a percent of total actions. [Ref. 4:p. 30]

Discussions concerning increasing contract administration input into PUR have centered around two basic approaches. First, establish a set ratio between the numbers of buyers/negotiators and contract administrators. The second approach is to construct a contract administration matrix where an NFCA would receive credit for the type and number of a contract administration function performed.

This study will examine more closely the matrix approach, in an attempt to quantify contract administration efforts.

Chapter III discusses a questionnaire that was established to determine the feasibility of constructing such a contract administration matrix.

### III. QUESTIONNAIRE AND THE DATA MATRIX

#### A. BACKGROUND AND PURPOSE OF THE QUESTIONNAIRE

In the preceding chapters PUR has been defined, its procedural requirements explained, and its objectives stated. The lack of contract administration input for deriving productive units was highlighted. The concept of quantifying contract administration efforts was introduced, and will now be discussed in further detail.

While initial research showed that data concerning contracts awarded are collected by NFCAs and forwarded to NAVSUP on a systematic basis, there is no known uniform reporting system for contract administration efforts. The basic problem is that the establishment of a contract can be quantified, while establishing a standard "productive unit" for each contract administration action appears to be too difficult. As an example, how can a productive unit be established for a "TERMINATION FOR DEFAULT" action, which may take anywhere from a couple of hours to a few years to complete?

Yet the perceived difficulty in establishing detailed productive units for contract administration functions should not deter efforts to establish a general productivity framework, from which further detailed studies may be in order. An initial framework could establish functional

estimates and averages that may highlight key trends, and would consolidate raw data that would be useful for follow-on studies.

The objective thus became to obtain contract administration workload data from major NFCAs, from which trend analyses could be conducted that would address the feasibility of deriving standardized values for contract administration functions. As an example, what if all commands reported that the contract administration function "TERMINATION FOR DEFAULT" required 20 hours (average) per contract, affected 5% of all contracts processed (reviewed) during a fiscal year, and accounted for 10% of the total contract administration workload? If there was a strong correlation between commands of different size and structure, than that information may be very useful toward quantifying the function and including it in the derivation of a "productive unit." This would directly relate a contract administration function to the budgetary process.

#### B. EVOLVING THE QUESTIONNAIRE

Appendices A through C present the questionnaire package that was derived from the goal of establishing an initial framework for quantifying contract administration functions. It will now be referred to as simply "the questionnaire" or "the survey." The initial framework for the survey was obtained from Appendix IV of the EAI report, which was an

Operational Task List for contract administration functions performed at a Navy Supply Center. The Operational Task List was the result of a manpower study. A major objective of the manpower study was to develop a reporting system for productivity in the Contract Administration Division.

Each contract administration function was individually identified in the questionnaire. Examples were given of the type of action items that pertained to each function. Each NFCA was to state the affect that each function had on the total yearly workload. This affect was measured by both the number of contracts affected and the labor hours expended. The initial questionnaire was reviewed by a variety of NAVSUP and NSC contracting personnel. Recommendations and comments were incorporated into the questionnaire so that it was in a more relevant format for a wider variety of command structures.

Questionnaires were delivered to all NSCs, ICPs, and NRCCs via certified mail, with follow-on phone calls made in order to ascertain who the Points of Contact (POCs) were. Constant communications with the POCs ensured that problems were rectified immediately.

#### C. PROBLEMS ENCOUNTERED

The researcher was concerned with two potential problem areas, due to the length of the questionnaire: the limited

availability of resources at NFCAs to gather the required data, and the limited availability of the data.

To minimize these concerns the participating commands were given over one month to complete the questionnaire, and allowed to give rough estimates (including a range for an answer) when detailed data were not available. Extensive phone conversations with POCs enforced the concept that estimates, based on experience and professional judgement, should be used whenever detailed data were not available. The questionnaire was evolved knowing that activities may not have the time or resources to meticulously sift through historical data and derive detailed productive units for each contract administration function. NFCAs were asked to give their best estimate as to "the number of the work hours per contract required to complete each unique contract administration function," as well as "the number of contracts affected by the function in a year." In addition, the questionnaire contained detailed guidance as to how the data should be recorded. Commands were also given the opportunity to review their input, and provide updated data as desired.

Gamesmanship was minimized by informing each participant that data would be recorded in a generic manner (e.g., NSC1, ICPl, NRCC1, etc.), and that specific commands would not be identified. Participation was encouraged by stating that all questionnaire participants would receive copies of all data and analyses. This not only fostered participation, but

provided the participants an opportunity to voice their opinions as to what were the key trends, and what was the significance of them.

Of the 12 commands that were sent the questionnaire, nine replied with data that could be recorded and consolidated in the desired format. Two commands, the Navy Ships Part Control Center and the Aviation Supply Office, responded with data that could not be translated into the questionnaire format. Therefore both Inventory Control Points were deleted from the scope of the research. One NSC replied with data that represented the "intended workload" and not the "actual workload," and therefore was not included in the analyses.

#### D. DATA MATRIX HEADINGS

Appendix F consolidates all the recorded data from the participating commands. It is important that the Horizontal and Vertical Headings for Appendix F be fully understood.

##### 1. Horizontal Headings

###### a. NSC1 to NSC6

NSC1 to NSC6 represents the generic codes assigned to the six Navy Supply Centers that responded to the questionnaire.

###### b. NRCC1 to NRCC3

NRCC1 to NRCC3 represents the generic codes assigned to the three Navy Regional Contracting Centers in the continental United States that responded to the questionnaire.

c. NSC AVG

NSC AVG is the calculated average for all Navy Supply Centers. For some Vertical Headings this was a weighted average. Each Vertical Heading will be addressed separately.

1. # OF CONTRACTS PROCESSED (ESTIMATE)--Mathematical average for all NSCs.
2. # OF LABOR HOURS (ESTIMATE)--Mathematical average for all NSCs.
3. # CONTRACTS AFFECTED--Mathematical average for all NSCs.
4. % OF CONTRACTS PROCESSED--The NSC AVG for # OF CONTRACTS AFFECTED divided by the NSC AVG for # OF CONTRACTS PROCESSED (ESTIMATE).
5. # LABOR HRS/CONTRACT--The total number of contracts affected for NSCs, divided by the total labor hours allocated to the function by all NSCs.
6. TOTAL LABOR HRS/FUNCTION--The NSC AVG for # CONTRACTS AFFECTED multiplied by the NSC AVG for # LABOR HRS/CONTRACT.
7. % TOTAL LABOR HRS (ESTIMATE)--The NSC AVG for TOTAL LABOR HRS/FUNCTION divided by the NSC AVG for # OF LABOR HOURS (ESTIMATE).

d. NSC DEV %

NSC DEV % is the standard deviation for a NSC value, divided by the mathematical average. This allows functions with different averages to be compared on a relative scale. For example, assume that the contract administration function "ISSUES SHOW CAUSE NOTICE" affects, on the average, 500 contracts per Navy Supply Center per year, with a standard deviation of plus or minus 50 contracts. Suppose the function "ISSUES STOP WORK ORDER" affects, on the average, 100



contracts per Navy Supply Center per year, with a standard deviation of plus or minus 25 contracts. A comparison of just the standard deviations for the two functions (50 and 25) leads one to believe that there is greater deviation in the estimate for the "ISSUES SHOW CAUSE NOTICE" function. Yet this does not take into account the differences in the average values for the two functions. By dividing the standard deviation by the average, the deviation factors become 10% and 25%, and relative to the "ISSUES SHOW CAUSE NOTICE" function the "ISSUES STOP WORK ORDER" has a greater estimate deviation. In this manner it is possible to compare, if only to identify general trends, deviation factors between different functions while accounting for differences in their average values.

e. NRCC AVG

NRCC AVG is the calculated average for all Navy Regional Contracting Centers. Refer to NSC AVG.

f. NRCC DEV %

NRCC DEV % is the standard deviation for a NRCC value, divided by the average. Refer to NSC DEV %.

g. TOTAL AVG

TOTAL AVG is the calculated average for all commands. Refer to NSC AVG.

h. TOTAL DEV %

TOTAL DEV % is the standard deviation for a TOTAL value, divided by the average. Refer to NSC DEV %.

## 2. Vertical Headings

### a. # OF CONTRACTS PROCESSED (ESTIMATE)

# OF CONTRACTS PROCESSED (ESTIMATE) is the number of contracts that a command processed in FY 88. This includes not only newly established contracts, but multi-year contracts that required contract administration work (modifications, etc.) and contracts that were closed out.

### b. # OF LABOR HOURS (ESTIMATE)

# OF LABOR HOURS (ESTIMATE) is the total labor hours estimated by commands to complete all contract administration functions in FY 88. Each function was extended (# CONTRACTS AFFECTED multiplied by # LABOR HRS/FUNCTION), and then accumulated for a total figure for the command.

### c. # CONTRACTS AFFECTED

# CONTRACTS AFFECTED is the estimated number of contracts that were affected by the function.

### d. % OF CONTRACTS PROCESSED

% OF CONTRACTS PROCESSED is the # CONTRACTS AFFECTED divided by the # OF CONTRACTS PROCESSED (ESTIMATE).

### e. # LABOR HRS/CONTRACT

# LABOR HRS/CONTRACT is the estimated number of labor hours per contract required to complete the function. When a command gave a range for an input (e.g., 10-30 hours per contract), the median was used (i.e., 20 hours). Commands were given a spreadsheet that showed their initial input, and

had the opportunity to make modifications if they disagreed with using a median.

f. TOTAL LABOR HRS/FUNCTION

TOTAL LABOR HRS/FUNCTION are the total labor hours expended during a year for the function. It is derived by multiplying # CONTRACTS AFFECTED by the TOTAL LABOR HRS/FUNCTION.

g. % TOTAL LABOR HRS (ESTIMATE)

% TOTAL LABOR HRS (ESTIMATE) are the TOTAL LABOR HRS/FUNCTION divided by the # OF LABOR HOURS (ESTIMATE).

Chapter IV will present a detailed analysis of the recorded data.

#### IV. DATA TREND ANALYSIS

##### A. GENERAL

To determine the feasibility of quantifying contract administration actions and incorporating them into the PUR model, the 33 functions in Appendix F will be examined and compared in three distinct manners. First, the percent of the total contracts that each function affects will be analyzed. This will identify the range of each function, regardless of how many hours are spent on a contract per function. Using "percent of contracts" vice "number of contracts" allows for comparing commands that have different workloads. The assumption is that the size of the workforce, or workload, should not affect the percent of work type done.

Second, the estimated labor hours per contract per function will be examined. This will highlight the depth of each function, regardless of how many contracts are affected.

Third, the percent of the total command contract administration labor hours that each function represents will be highlighted. This factor will account for both the range and depth of each function.

Each of the three factors will examine the functions according to their command structure. Individual data will be presented for NSCs, and NRCCs, and a TOTAL for all commands.

Each factor will also include an analysis of a deviation percent. This factor was originally addressed in Chapter III.

## B. PERCENT OF TOTAL CONTRACTS AFFECTED

### 1. NSC Data

Table 4.1 states the percent of total contracts affected, during FY 88, for NSCs.

The functions have been sorted according to the percent of contracts affected. For reference purposes, the numerical designations in the vertical headings are identical to those used in Appendix F.

Total contracts represents all contracts that were processed in FY 88. This includes not only contracts established in FY 88, but multi-year contracts that were monitored during FY 88 and contracts that were closed out in FY 88. The percent readings show that those functions that one would expect to affect a wider range of contracts have a higher percent, while those functions that deal with unique situations have a low average. A reading of ".00" does not mean that the function did not affect any contracts, but that the percent reading was so low that a three decimal place reading would be required to record it. For the scope of this study, using three decimal reading is not practical.

Even though the percent readings may follow an expected norm, how much deviation is there between the commands? For example, even through the "5. REVIEW PROGRESS"

TABLE 4.1

NSC DATA  
PERCENT OF THE TOTAL CONTRACTS PROCESSED  
DURING FY 88 AFFECTED BY THE FUNCTION

FUNCTION	PERCENT OF TOTAL CONTRACTS AFFECTED	DEVIATION PERCENT
5. REVIEW PROGRESS	.35	0.82
1. CONTRACT REVIEW	.30	0.46
23. PREPARE REPORT	.22	1.27
22. CONTRACT CLOSE OUT	.21	0.51
8. MONITOR PERFORMANCE	.19	0.47
13E. MODIFY PERF. PERIOD	.13	0.60
12. PROCESS PAYMENT	.12	0.44
24. SERVICE CONTRACTS	.11	0.52
13J. MODIFY "ALL OTHER"	.08	0.47
14. ADMIN CHANGE MOD.	.08	1.35
13B. MODIFY MATL/DESCRIP.	.07	0.89
2. PRE POST-AWARD CONF.	.07	1.11
13G. CHANGE COTR	.06	0.70
13D. ADD/DELETE ITEMS	.06	0.95
3. POST-AWARD CONF.	.06	1.28
13F. MODIFY QA REQMT.	.05	1.30
13A. MODIFY PRICE	.05	1.81
13C. MODIFY INSP./ACCEPT.	.05	2.10
13H. MODIFY QUANTITY	.04	0.76
13I. MODIFY DEL. DEST.	.03	1.20
4. POST-AWARD LETTER	.03	1.61
11. "SHOW CAUSE" NOTICE	.02	0.64
17. CLAIMS/APPEALS	.02	0.65
10. "CURE" NOTICE	.02	0.74
19. TERM. FOR CONV.	.01	0.52
15. CHANGE ORDER MOD.	.01	0.59
18. SHIPM. PROBLEMS	.01	0.71
6. "STOP WORK" ORDER	.01	0.86
9. VISITS CONTRACTOR	.01	0.97
16. PROCESS GFE/GFM	.01	4.43
20. TERM. FOR DEFAULT	.00	1.03
21. BANKRUPT./INSOLV.	.00	1.51
7. ASSESS LIQ. DAMAGES	.00	3.27

function covers on the average 35% of all NSC contracts, does that mean that all the individual NSC commands have readings that are close to 35%? Or are the readings for the individual commands between 30% and 40%, 20% and 50%, or even 10% and 60%?

The deviation percent is used to address this problem. The deviation percent states the standard deviation of the command averages, divided by the average. As discussed earlier, just using the standard deviation to compare functions would not take into account the value of the average for the function. For example, the individual command data have been listed for the functions of "1. CONTRACT REVIEW," "5. REVIEW PROGRESS" AND "3. POST-AWARD CONF.":

	NSC1	NSC2	NSC3	NSC4	NSC5	NSC6	DEV	DEV %
1.	0.26	0.61	0.24	0.29	0.35	0.75	0.19	0.46
5.	0.11	0.09	0.32	1.00	0.28	0.42	0.30	0.82
3.	0.00	0.02	0.17	0.01	0.06	0.01	0.06	1.28

The standard deviation is stated in the column designated "DEV," while the deviation percent is under "DEV %." Going strictly by the standard deviation it appears that "3. POST-AWARD CONF." has the lowest deviation. Yet to compare the deviations between different functions the relative value of the average has to be considered. The "DEV %" states that the standard deviation for "1. CONTRACT REVIEW" is 46% of the functional average, while the standard deviation

for "3. POST-AWARD CONF." is 128% of the functional average. Relative to the mathematical average of the data, there is far less deviation for "1. CONTRACT REVIEW" than for "3. POST-AWARD CONF."

It must be emphasized that the numerical average used for the deviation percent is not the average that is stated under "PERCENT OF TOTAL CONTRACTS AFFECTED" in Table 4.1. That figure was derived by dividing the total figure for NSCs for "Contracts Affected" by the total figure for NSCs for "Contracts Processed." Taking the average of percentages does not derive the overall average. The average of the percentages was only used to derive a deviation percent that would state the relative deviation between different functions.

Table 4.2 presents the same information as Table 4.1, but sorted by the deviation percent. The deviation percent has a range of 44% to 443%. The lowest deviation percent is still 44% of the numerical average, which means that individual command entries vary a great deal. For NSCs, the general averages represent the expected norms, but the deviation between commands as to the percent of the contracts affected by each function is too large to draw any significant correlation conclusions between the commands.



TABLE 4.2

NSC DATA  
PERCENT OF THE TOTAL CONTRACTS PROCESSED  
DURING FY 88 AFFECTED BY THE FUNCTION  
(BY DEVIATION PERCENT)

FUNCTION	PERCENT OF TOTAL CONTRACTS AFFECTED	DEVIATION PERCENT
12. PROCESS PAYMENT	.12	0.44
1. CONTRACT REVIEW	.30	0.46
8. MONITOR PERFORMANCE	.19	0.47
13J. MODIFY "ALL OTHER"	.08	0.47
22. CONTRACT CLOSE OUT	.21	0.51
24. SERVICE CONTRACTS	.11	0.52
19. TERM. FOR CONV.	.01	0.52
15. CHANGE ORDER MOD.	.01	0.59
13E. MODIFY PERF. PERIOD	.13	0.60
11. "SHOW CAUSE" NOTICE	.02	0.64
17. CLAIMS/APPEALS	.02	0.65
13G. CHANGE COTR	.06	0.70
18. SHIPM. PROBLEMS	.01	0.71
10. "CURE" NOTICE	.02	0.74
13H. MODIFY QUANTITY	.04	0.76
5. REVIEW PROGRESS	.35	0.82
6. "STOP WORK" ORDER	.01	0.86
13B. MODIFY MATL/DESCRIP.	.07	0.89
13D. ADD/DELETE ITEMS	.06	0.95
9. VISITS CONTRACTOR	.01	0.97
20. TERM. FOR DEFAULT	.00	1.03
2. PRE POST-AWARD CONF.	.07	1.11
13I. MODIFY DEL. DEST.	.03	1.20
23. PREPARE REPORT	.22	1.27
3. POST-AWARD CONF.	.06	1.28
13F. MODIFY QA REQMT.	.05	1.30
14. ADMIN CHANGE MOD.	.08	1.35
21. BANKRUPT./INSOLV.	.00	1.51
4. POST-AWARD LETTER	.03	1.61
13A. MODIFY PRICE	.05	1.81
13C. MODIFY INSP./ACCEPT.	.05	2.10
7. ASSESS LIQ. DAMAGES	.00	3.27
16. PROCESS GFE/GFM	.01	4.43

## 2. NRCC Data

Tables 4.3 and 4.4 reflect NRCC data.

TABLE 4.3

NRCC DATA		
PERCENT OF THE TOTAL CONTRACTS PROCESSED DURING FY 88 AFFECTED BY THE FUNCTION		
FUNCTION	PERCENT OF TOTAL CONTRACTS AFFECTED	DEVIATION PERCENT
8. MONITOR PERFORMANCE	.42	0.32
5. REVIEW PROGRESS	.32	0.89
14. ADMIN CHANGE MOD.	.24	0.65
23. PREPARE REPORT	.20	2.17
1. CONTRACT REVIEW	.17	0.46
22. CONTRACT CLOSE OUT	.07	0.71
12. PROCESS PAYMENT	.06	2.29
24. SERVICE CONTRACTS	.06	2.61
4. POST-AWARD LETTER	.05	0.88
13A. MODIFY PRICE	.04	4.55
15. CHANGE ORDER MOD.	.03	0.58
10. "CURE" NOTICE	.02	0.15
11. "SHOW CAUSE" NOTICE	.02	0.43
2. PRE POST-AWARD CONF.	.02	0.96
3. POST-AWARD CONF.	.02	0.96
13E. MODIFY PERF. PERIOD	.02	1.17
18. SHIPM. PROBLEMS	.02	1.80
13B. MODIFY MATL/DESCRIP.	.02	1.89
19. TERM. FOR CONV.	.01	0.15
17. CLAIMS/APPEALS	.01	0.23
20. TERM. FOR DEFAULT	.01	0.28
13C. MODIFY INSP./ACCEPT.	.01	0.35
6. "STOP WORK" ORDER	.01	0.49
13J. MODIFY "ALL OTHER"	.01	2.59
13H. MODIFY QUANTITY	.01	3.09
13G. CHANGE COTR	.00	0.00
13I. MODIFY DEL. DEST.	.00	0.53
13F. MODIFY QA REQMT.	.00	0.54
13D. ADD/DELETE ITEMS	.00	0.81
21. BANKRUPT./INSOLV.	.00	1.97
9. VISITS CONTRACTOR	.00	2.51
16. PROCESS GFE/GFM	.00	6.21
7. ASSESS LIQ. DAMAGES	.00	6.51

TABLE 4.4

NRCC DATA  
 PERCENT OF THE TOTAL CONTRACTS PROCESSED  
 DURING FY 88 AFFECTED BY THE FUNCTION  
 (BY DEVIATION PERCENT)

FUNCTION	PERCENT OF TOTAL CONTRACTS AFFECTED	DEVIATION PERCENT
13G. CHANGE COTR	.00	0.00
10. "CURE" NOTICE	.02	0.15
19. TERM. FOR CONV.	.01	0.15
17. CLAIMS/APPEALS	.01	0.23
20. TERM. FOR DEFAULT	.01	0.28
8. MONITOR PERFORMANCE	.42	0.32
13C. MODIFY INSP./ACCEPT.	.01	0.35
11. "SHOW CAUSE" NOTICE	.02	0.43
1. CONTRACT REVIEW	.17	0.46
6. "STOP WORK" ORDER	.01	0.49
13I. MODIFY DEL. DEST.	.00	0.53
13F. MODIFY QA REQMT.	.00	0.54
15. CHANGE ORDER MOD.	.03	0.58
14. ADMIN CHANGE MOD.	.24	0.65
22. CONTRACT CLOSE OUT	.07	0.71
13D. ADD/DELETE ITEMS	.00	0.81
4. POST-AWARD LETTER	.05	0.88
5. REVIEW PROGRESS	.32	0.89
2. PRE POST-AWARD CONF.	.02	0.96
3. POST-AWARD CONF.	.02	0.96
13E. MODIFY PERF. PERIOD	.02	1.17
18. SHIPM. PROBLEMS	.02	1.80
13B. MODIFY MATL/DESCRIP.	.02	1.89
21. BANKRUPT./INSOLV.	.00	1.97
23. PREPARE REPORT	.20	2.17
12. PROCESS PAYMENT	.06	2.29
9. VISITS CONTRACTOR	.00	2.51
13J. MODIFY "ALL OTHER"	.01	2.59
24. SERVICE CONTRACTS	.06	2.61
13H. MODIFY QUANTITY	.01	3.09
13A. MODIFY PRICE	.04	4.55
16. PROCESS GFE/GFM	.00	6.21
7. ASSESS LIQ. DAMAGES	.00	6.51

Table 4.3 shows that NRCCs also follow the expected norm as to the percent of contracts affected. "8. MONITOR PERFORMANCE" and "5. REVIEW PROGRESS" are both very high, while such functions as "7. ASSESS LIQ. DAMAGES" AND "16. PROCESS GFE/GFM" are extremely low. Yet the deviation percent stated in Table 4.4 has a wide range, from 0% (because only one of the three NRCCs reported using that function) to 651%. Both NSCs and NRCCs report similar functions at both ends of the "contracts affected" scale, yet show a great deal of variation between commands.

### 3. Total Data

Data for viewing all commands is given in Tables 4.5 and 4.6.

Table 4.5 highlights the fact that NSC and NRCC were similar in regards to the functions that affected the most contracts, and that the averages for TOTAL commands tended to "round out" the data. However, Table 4.6 still depicts a deviation percent range of 50% to 714%. The credibility of the similarities between NSC and NRCC is undermined by the wide range in the deviation percents.

## C. LABOR HOURS PER CONTRACT

### 1. NSC Data

Labor hours per contract attempts to identify how much time a command requires to complete a function for one contract. Tables 4.7 and 4.8 reflect NSC data.

TABLE 4.5

TOTAL DATA  
PERCENT OF THE TOTAL CONTRACTS PROCESSED  
DURING FY 88 AFFECTED BY THE FUNCTION

	FUNCTION	NSC	NRCC	TOTAL
8.	MONITOR PERFORMANCE	.19	.42	.34
5.	REVIEW PROGRESS	.35	.32	.33
1.	CONTRACT REVIEW	.30	.17	.21
23.	PREPARE REPORT	.22	.20	.21
14.	ADMIN CHANGE MOD.	.08	.24	.19
22.	CONTRACT CLOSE OUT	.21	.07	.11
12.	PROCESS PAYMENT	.12	.06	.08
24.	SERVICE CONTRACTS	.11	.06	.08
13E.	MODIFY PERF. PERIOD	.13	.02	.06
13B.	MODIFY MATL/DESCRIP.	.07	.02	.04
13A.	MODIFY PRICE	.05	.04	.04
4.	POST-AWARD LETTER	.03	.05	.04
13J.	MODIFY "ALL OTHER"	.08	.01	.03
2.	PRE POST-AWARD CONF.	.07	.02	.03
3.	POST-AWARD CONF.	.06	.02	.03
15.	CHANGE ORDER MOD.	.01	.03	.03
13G.	CHANGE COTR	.06	.00	.02
13D.	ADD/DELETE ITEMS	.06	.00	.02
13C.	MODIFY INSP./ACCEPT.	.05	.01	.02
13F.	MODIFY QA REQMT.	.05	.00	.02
13H.	MODIFY QUANTITY	.04	.01	.02
11.	"SHOW CAUSE" NOTICE	.02	.02	.02
10.	"CURE" NOTICE	.02	.02	.02
13I.	MODIFY DEL. DEST.	.03	.00	.01
17.	CLAIMS/APPEALS	.02	.01	.01
18.	SHIPM. PROBLEMS	.01	.02	.01
19.	TERM. FOR CONV.	.01	.01	.01
6.	"STOP WORK" ORDER	.01	.01	.01
20.	TERM. FOR DEFAULT	.00	.01	.01
9.	VISITS CONTRACTOR	.01	.00	.00
16.	PROCESS GFE/GFM	.01	.00	.00
21.	BANKRUPT./INSOLV.	.00	.00	.00
7.	ASSESS LIQ. DAMAGES	.00	.00	.00

TABLE 4.6

TOTAL DATA  
PERCENT OF THE TOTAL CONTRACTS PROCESSED  
DURING FY 88 AFFECTED BY THE FUNCTION  
(BY DEVIATION PERCENT)

FUNCTION	NSC	NRCC	TOTAL
19. TERM. FOR CONV.	0.52	0.15	0.50
15. CHANGE ORDER MOD.	0.59	0.58	0.50
1. CONTRACT REVIEW	0.46	0.46	0.51
8. MONITOR PERFORMANCE	0.47	0.32	0.51
10. "CURE" NOTICE	0.74	0.15	0.54
20. TERM. FOR DEFAULT	1.03	0.28	0.61
11. "SHOW CAUSE" NOTICE	0.64	0.43	0.69
5. REVIEW PROGRESS	0.82	0.89	0.85
17. CLAIMS/APPEALS	0.65	0.23	0.90
14. ADMIN CHANGE MOD.	1.35	0.65	0.91
22. CONTRACT CLOSE OUT	0.51	0.71	0.99
6. "STOP WORK" ORDER	0.86	0.49	1.07
12. PROCESS PAYMENT	0.44	2.29	1.13
13J. MODIFY "ALL OTHER"	0.47	2.59	1.17
2. PRE POST-AWARD CONF.	1.11	0.96	1.21
4. POST-AWARD LETTER	1.61	0.88	1.32
3. POST-AWARD CONF.	1.28	0.96	1.35
24. SERVICE CONTRACTS	0.52	2.61	1.44
13E. MODIFY PERF. PERIOD	0.60	1.17	1.54
13H. MODIFY QUANTITY	0.76	3.09	1.58
13B. MODIFY MATL/DESCRIP.	0.89	1.89	1.60
23. PREPARE REPORT	1.27	2.17	1.86
18. SHIPM. PROBLEMS	0.71	1.80	1.91
13G. CHANGE COTR	0.70	0.00	2.13
9. VISITS CONTRACTOR	0.97	2.51	2.34
13I. MODIFY DEL. DEST.	1.20	0.53	2.51
21. BANKRUPT./INSOLV.	1.51	1.97	2.62
13D. ADD/DELETE ITEMS	0.95	0.81	2.80
13A. MODIFY PRICE	1.81	4.55	2.97
13F. MODIFY QA REQMT.	1.30	0.54	3.36
13C. MODIFY INSP./ACCEPT.	2.10	0.35	4.42
7. ASSESS LIQ. DAMAGES	3.27	6.51	5.87
16. PROCESS GFE/GFM	4.43	6.21	7.14

TABLE 4.7

NSC DATA  
ESTIMATED LABOR HOURS EXPENDED  
PER CONTRACT PER FUNCTION

FUNCTION	AVG LABOR HRS EXPENDED PER CONTRACT	DEVIATION PERCENT
17. CLAIMS/APEALS	51.9	1.00
20. TERM. FOR DEFAULT	40.4	0.52
19. TERM. FOR CONV.	17.1	0.57
24. SERVICE CONTRACTS	14.8	0.60
7. ASSESS LIQ. DAMAGES	11.7	0.54
9. VISITS CONTRACTOR	5.3	1.52
21. BANKRUPT./INSOLV.	5.1	1.08
3. POST-AWARD CONF.	4.3	1.27
2. PRE POST-AWARD CONF.	4.3	0.74
22. CONTRACT CLOSE OUT	3.9	0.58
13A. MODIFY PRICE	3.7	1.61
8. MONITOR PERFORMANCE	3.5	0.81
10. "CURE" NOTICE	3.4	1.86
15. CHANGE ORDER MOD.	3.3	1.52
6. "STOP WORK" ORDER	3.3	0.93
18. SHIPM. PROBLEMS	3.2	0.39
13H. MODIFY QUANTITY	3.1	3.67
11. "SHOW CAUSE" NOTICE	3.1	1.80
16. PROCESS GFE/GFM	2.9	2.01
1. CONTRACT REVIEW	2.2	1.20
14. ADMIN CHANGE MOD.	2.0	0.75
13E. MODIFY PERF. PERIOD	1.9	0.90
12. PROCESS PAYMENT	1.5	0.38
13D. ADD/DELETE ITEMS	1.4	0.81
5. REVIEW PROGRESS	1.4	0.75
13I. MODIFY DEL. DEST.	1.1	2.29
13G. CHANGE COTR	1.1	0.70
13J. MODIFY "ALL OTHER"	1.1	0.31
23. PREPARE REPORT	1.0	5.59
13B. MODIFY MATL/DESCRIP.	0.9	3.78
13C. MODIFY INSP./ACCEPT.	0.8	3.30
13F. MODIFY QA REQMT.	0.8	0.56
4. POST-AWARD LETTER	0.5	0.59

TABLE 4.8

NSC DATA  
ESTIMATED LABOR HOURS EXPENDED  
PER CONTRACT PER FUNCTION  
(BY DEVIATION FACTOR)

FUNCTION	AVG LABOR HRS EXPENDED PER CONTRACT	DEVIATION PERCENT
13J. MODIFY "ALL OTHER"	1.1	0.31
12. PROCESS PAYMENT	1.5	0.38
18. SHIPM. PROBLEMS	3.2	0.39
20. TERM. FOR DEFAULT	40.4	0.52
7. ASSESS LIQ. DAMAGES	11.7	0.54
13F. MODIFY QA REQMT.	0.8	0.56
19. TERM. FOR CONV.	17.1	0.57
22. CONTRACT CLOSE OUT	3.9	0.58
4. POST-AWARD LETTER	0.5	0.59
24. SERVICE CONTRACTS	14.8	0.60
13G. CHANGE COTR	1.1	0.70
2. PRE POST-AWARD CONF.	4.3	0.74
14. ADMIN CHANGE MOD.	2.0	0.75
5. REVIEW PROGRESS	1.4	0.75
8. MONITOR PERFORMANCE	3.5	0.81
13D. ADD/DELETE ITEMS	1.4	0.81
13E. MODIFY PERF. PERIOD	1.9	0.90
6. "STOP WORK" ORDER	3.3	0.93
17. CLAIMS/APPEALS	51.9	1.00
21. BANKRUPT./INSOLV.	5.1	1.08
1. CONTRACT REVIEW	2.2	1.20
3. POST-AWARD CONF.	4.3	1.27
9. VISITS CONTRACTOR	5.3	1.52
15. CHANGE ORDER MOD.	3.3	1.52
13A. MODIFY PRICE	3.7	1.61
11. "SHOW CAUSE" NOTICE	3.1	1.80
10. "CURE" NOTICE	3.4	1.86
16. PROCESS GFE/GFM	2.9	2.01
13I. MODIFY DEL. DEST.	1.1	2.29
13C. MODIFY INSP./ACCEPT.	0.8	3.30
13H. MODIFY QUANTITY	3.1	3.67
13B. MODIFY MATL/DESCRIP.	0.9	3.78
23. PREPARE REPORT	1.0	5.59



Table 4.7 reflects the long hours required to process claims and appeals, contract terminations, and service contracts. Once again the deviation percents stated in Table 4.8 are high, and are not biased toward any type of function. The deviation percent does not favor either functions that require a long time to complete or a short time to complete. The high deviation is pretty much across the board.

## 2. NRCC Data

Tables 4.9 and 4.10 reflect NRCC standings.

Table 4.9 shows that NRCCs, like NSCs, expend more hours per contract for such topics as claims and appeals, terminations, and visiting the contractor. Yet it is not possible to draw any further conclusions concerning the similarities and differences due to the high deviation percentages stated in Table 4.10.

Functions that have no deviation (i.e., deviation percent of 00%) do not necessarily mean that there is a strong correlation between the commands. A deviation percent of 00% can result from having only one command report that the function is performed in any measurable amount. When only one command responds (or even no commands), the deviation percent will be 00%.

## 3. Total Data

Tables 4.11 and 4.12 give a consolidated view for NSCs and NRCCs for labor hours expended per contract per function.

TABLE 4.9

NRCC DATA  
ESTIMATED LABOR HOURS EXPENDED  
PER CONTRACT PER FUNCTION

FUNCTION	AVG LABOR HRS EXPENDED PER CONTRACT	DEVIATION PERCENT
17. CLAIMS/APPEALS	23.5	0.20
20. TERM. FOR DEFAULT	20.5	0.28
19. TERM. FOR CONV.	17.8	0.35
13A. MODIFY PRICE	10.4	0.45
13B. MODIFY MATL/DESCRIP.	10.0	0.52
9. VISITS CONTRACTOR	8.0	0.00
13J. MODIFY "ALL OTHER"	7.2	0.33
2. PRE POST-AWARD CONF.	7.1	0.58
3. POST-AWARD CONF.	6.8	0.53
24. SERVICE CONTRACTS	6.4	0.23
6. "STOP WORK" ORDER	5.9	0.21
10. "CURE" NOTICE	5.7	1.00
13E. MODIFY PERF. PERIOD	5.6	0.27
12. PROCESS PAYMENT	5.6	1.34
13D. ADD/DELETE ITEMS	5.3	0.72
13I. MODIFY DEL. DEST.	4.9	0.21
13H. MODIFY QUANTITY	4.7	0.26
11. "SHOW CAUSE" NOTICE	4.4	1.29
7. ASSESS LIQ. DAMAGES	4.0	0.00
8. MONITOR PERFORMANCE	3.3	2.27
21. BANKRUPT./INSOLV.	3.0	0.50
13C. MODIFY INSP./ACCEPT.	2.9	0.17
13F. MODIFY QA REQMT.	2.9	0.17
15. CHANGE ORDER MOD.	2.8	4.15
14. ADMIN CHANGE MOD.	1.6	0.40
23. PREPARE REPORT	1.4	0.42
18. SHIPM. PROBLEMS	1.4	0.53
5. REVIEW PROGRESS	1.2	0.33
1. CONTRACT REVIEW	1.2	0.53
4. POST-AWARD LETTER	1.0	0.00
16. PROCESS GFE/GFM	1.0	0.48
22. CONTRACT CLOSE OUT	0.8	0.96
13G. CHANGE COTR	0.0	0.00

TABLE 4.10

NRCC DATA  
ESTIMATED LABOR HOURS EXPENDED  
PER CONTRACT PER FUNCTION  
(BY DEVIATION PERCENT)

		AVG LABOR HRS EXPENDED PER CONTRACT	DEVIATION PERCENT
FUNCTION			
9.	VISITS CONTRACTOR	8.0	0.00
7.	ASSESS LIQ. DAMAGES	4.0	0.00
4.	POST-AWARD LETTER	1.0	0.00
13G.	CHANGE COTR	0.0	0.00
13C.	MODIFY INSP./ACCEPT.	2.9	0.17
13F.	MODIFY QA REQMT.	2.9	0.17
17.	CLAIMS/APPEALS	23.5	0.20
6.	"STOP WORK" ORDER	5.9	0.21
13I.	MODIFY DEL. DEST.	4.9	0.21
24.	SERVICE CONTRACTS	6.4	0.23
13H.	MODIFY QUANTITY	4.7	0.26
13E.	MODIFY PERF. PERIOD	5.6	0.27
20.	TERM. FOR DEFAULT	20.5	0.28
13J.	MODIFY "ALL OTHER"	7.2	0.33
5.	REVIEW PROGRESS	1.2	0.33
19.	TERM. FOR CONV.	17.8	0.35
14.	ADMIN CHANGE MOD.	1.6	0.40
23.	PREPARE REPORT	1.4	0.42
13A.	MODIFY PRICE	10.4	0.45
16.	PROCESS GFE/GFM	1.0	0.48
21.	BANKRUPT./INSOLV.	3.0	0.50
13B.	MODIFY MATL/DESCRIP.	10.0	0.52
3.	POST-AWARD CONF.	6.8	0.53
18.	SHIPM. PROBLEMS	1.4	0.53
1.	CONTRACT REVIEW	1.2	0.53
2.	PRE POST-AWARD CONF.	7.1	0.58
13D.	ADD/DELETE ITEMS	5.3	0.72
22.	CONTRACT CLOSE OUT	0.8	0.96
10.	"CURE" NOTICE	5.7	1.00
11.	"SHOW CAUSE" NOTICE	4.4	1.29
12.	PROCESS PAYMENT	5.6	1.34
8.	MONITOR PERFORMANCE	3.3	2.27
15.	CHANGE ORDER MOD.	2.8	4.15

TABLE 4.11

TOTAL DATA  
ESTIMATED LABOR HOURS EXPENDED  
PER CONTRACT PER FUNCTION

FUNCTION	NSC	NRCC	TOTAL
17. CLAIMS/APEALS	51.9	23.5	37.7
20. TERM. FOR DEFAULT	40.4	20.5	24.9
19. TERM. FOR CONV.	17.1	17.8	17.6
24. SERVICE CONTRACTS	14.8	6.4	10.2
7. ASSESS LIQ. DAMAGES	11.7	4.0	9.1
13A. MODIFY PRICE	3.7	10.4	7.7
9. VISITS CONTRACTOR	5.3	8.0	5.6
2. PRE POST-AWARD CONF.	4.3	7.1	5.3
3. POST-AWARD CONF.	4.3	6.8	5.2
10. "CURE" NOTICE	3.4	5.7	5.0
6. "STOP WORK" ORDER	3.3	5.9	4.7
21. BANKRUPT./INSOLV.	5.1	3.0	4.4
13B. MODIFY MATL/DESCRIP.	0.9	10.0	4.4
11. "SHOW CAUSE" NOTICE	3.1	4.4	3.9
13H. MODIFY QUANTITY	3.1	4.7	3.7
12. PROCESS PAYMENT	1.5	5.6	3.6
8. MONITOR PERFORMANCE	3.5	3.3	3.3
22. CONTRACT CLOSE OUT	3.9	0.8	2.9
13E. MODIFY PERF. PERIOD	1.9	5.6	2.9
15. CHANGE ORDER MOD.	3.3	2.8	2.8
13J. MODIFY "ALL OTHER"	1.1	7.2	2.7
16. PROCESS GFE/GFM	2.9	1.0	2.1
13I. MODIFY DEL. DEST.	1.1	4.9	2.0
13D. ADD/DELETE ITEMS	1.4	5.3	1.8
18. SHIPM. PROBLEMS	3.2	1.4	1.7
1. CONTRACT REVIEW	2.2	1.2	1.6
14. ADMIN CHANGE MOD.	2.0	1.6	1.6
5. REVIEW PROGRESS	1.4	1.2	1.3
23. PREPARE REPORT	1.0	1.4	1.3
13G. CHANGE COTR	1.1	0.0	1.1
13C. MODIFY INSP./ACCEPT.	0.8	2.9	1.1
13F. MODIFY QA REQMT.	0.8	2.9	0.9
4. POST-AWARD LETTER	0.5	1.0	0.9

TABLE 4.12

TOTAL DATA  
ESTIMATED LABOR HOURS EXPENDED  
PER CONTRACT PER FUNCTION  
(BY DEVIATION PERCENT)

FUNCTION	NSC	NRCC	TOTAL
19. TERM. FOR CONV.	0.57	0.35	0.51
4. POST-AWARD LETTER	0.59	0.00	0.52
6. "STOP WORK" ORDER	0.93	0.21	0.53
18. SHIPM. PROBLEMS	0.39	0.53	0.67
2. PRE POST-AWARD CONF.	0.74	0.58	0.69
20. TERM. FOR DEFAULT	0.52	0.28	0.70
13G. CHANGE COTR	0.70	0.00	0.70
7. ASSESS LIQ. DAMAGES	0.54	0.00	0.75
5. REVIEW PROGRESS	0.75	0.33	0.75
14. ADMIN CHANGE MOD.	0.75	0.40	0.78
22. CONTRACT CLOSE OUT	0.58	0.96	0.81
13E. MODIFY PERF. PERIOD	0.90	0.27	0.86
13F. MODIFY QA REQMT.	0.56	0.17	0.88
13A. MODIFY PRICE	1.61	0.45	0.92
13J. MODIFY "ALL OTHER"	0.31	0.33	1.09
13I. MODIFY DEL. DEST.	2.29	0.21	1.11
17. CLAIMS/APPEALS	1.00	0.20	1.15
21. BANKRUPT./INSOLV.	1.08	0.50	1.17
10. "CURE" NOTICE	1.86	1.00	1.22
9. VISITS CONTRACTOR	1.52	0.00	1.25
1. CONTRACT REVIEW	1.20	0.53	1.29
3. POST-AWARD CONF.	1.27	0.53	1.30
13B. MODIFY MATL/DESCRIP.	3.78	0.52	1.41
24. SERVICE CONTRACTS	0.60	0.23	1.44
11. "SHOW CAUSE" NOTICE	1.80	1.29	1.47
8. MONITOR PERFORMANCE	0.81	2.27	1.53
12. PROCESS PAYMENT	0.38	1.34	1.69
13D. ADD/DELETE ITEMS	0.81	0.72	1.83
13C. MODIFY INSP./ACCEPT.	3.30	0.17	2.02
13H. MODIFY QUANTITY	3.67	0.26	2.49
16. PROCESS GFE/GFM	2.01	0.48	2.52
15. CHANGE ORDER MOD.	1.52	4.15	3.37
23. PREPARE REPORT	5.59	0.42	3.87

While Table 4.11 does point out similarities between NSCs and NRCCs on the high end of the scale, careful consideration should also be given to the differences. For the modification functions (13A to 13H), the NRCC readings are consistently higher than the NSC readings. Yet a review of Table 4.5 shows that NSCs are consistently higher than NRCCs in regards to the percent of the total contracts processed that require modifications. A more detailed analysis of modifications may determine whether this finding is just a coincidence, or an example of a command structure difference. Any attempt to quantify and standardize contract administration functions would have to account for command structure differences, and may require separate standardized values for NSCs and NRCCs.

Table 4.12 shows that the deviation range for all commands (51% to 387%) is smaller than the NSC range (31% to 559%) and the NRCC range (00% to 415%). The deviation percents are still too high to identify any significant trends within a function.

#### D. PERCENT OF TOTAL LABOR HOURS EXPENDED

By looking at the percent of the total workload that the function accounts for, the overall impact of the range (percent of contracts affected) and depth (hours per contract) of the function can be ascertained.

# 1. NSC Data

Tables 4.13 and 4.14 present the data for NSCs

TABLE 4.13

NSC DATA		
ESTIMATED PERCENT OF TOTAL		
LABOR HOURS EXPENDED PER FUNCTION		
FUNCTION	PERCENT OF TOTAL LABOR HOURS EXPENDED	DEVIATION PERCENT
24. SERVICE CONTRACTS	0.20	0.52
17. CLAIMS/APPEALS	0.12	1.28
22. CONTRACT CLOSE OUT	0.10	0.51
1. CONTRACT REVIEW	0.08	0.64
8. MONITOR PERFORMANCE	0.08	0.98
5. REVIEW PROGRESS	0.06	0.43
2. PRE POST-AWARD CONF.	0.04	1.31
3. POST-AWARD CONF.	0.03	1.05
13E. MODIFY PERF. PERIOD	0.03	1.10
23. PREPARE REPORT	0.03	1.27
20. TERM. FOR DEFAULT	0.02	0.68
19. TERM. FOR CONV.	0.02	0.73
14. ADMIN CHANGE MOD.	0.02	0.82
13A. MODIFY PRICE	0.02	1.11
12. PROCESS PAYMENT	0.02	1.15
11. "SHOW CAUSE" NOTICE	0.01	0.55
10. "CURE" NOTICE	0.01	0.69
13G. CHANGE COTR	0.01	0.75
13D. ADD/DELETE ITEMS	0.01	0.87
13H. MODIFY QUANTITY	0.01	1.11
13J. MODIFY "ALL OTHER"	0.01	1.40
6. "STOP WORK" ORDER	0.01	1.62
13B. MODIFY MATL/DESCRIP.	0.01	1.64
13C. MODIFY INSP./ACCEPT.	0.01	4.62
21. BANKRUPT./INSOLV.	0.00	0.54
15. CHANGE ORDER MOD.	0.00	0.72
18. SHIPM. PROBLEMS	0.00	0.84
9. VISITS CONTRACTOR	0.00	1.06
13F. MODIFY QA REQMT.	0.00	1.30
4. POST-AWARD LETTER	0.00	1.57
7. ASSESS LIQ. DAMAGES	0.00	1.74
13I. MODIFY DEL. DEST.	0.00	1.76
16. PROCESS GFE/GFM	0.00	3.51

TABLE 4.14

NSC DATA  
ESTIMATED PERCENT OF TOTAL  
LABOR HOURS EXPENDED PER FUNCTION  
(BY DEVIATION PERCENT)

FUNCTION	PERCENT OF TOTAL LABOR HOURS EXPENDED	DEVIATION PERCENT
5. REVIEW PROGRESS	0.06	0.43
22. CONTRACT CLOSE OUT	0.10	0.51
24. SERVICE CONTRACTS	0.20	0.52
21. BANKRUPT./INSOLV.	0.00	0.54
11. "SHOW CAUSE" NOTICE	0.01	0.55
1. CONTRACT REVIEW	0.08	0.64
20. TERM. FOR DEFAULT	0.02	0.68
10. "CURE" NOTICE	0.01	0.69
15. CHANGE ORDER MOD.	0.00	0.72
19. TERM. FOR CONV.	0.02	0.73
13G. CHANGE COTR	0.01	0.75
14. ADMIN CHANGE MOD.	0.02	0.82
18. SHIPM. PROBLEMS	0.00	0.84
13D. ADD/DELETE ITEMS	0.01	0.87
8. MONITOR PERFORMANCE	0.08	0.98
3. POST-AWARD CONF.	0.03	1.05
9. VISITS CONTRACTOR	0.00	1.06
13E. MODIFY PERF. PERIOD	0.03	1.10
13A. MODIFY PRICE	0.02	1.11
13H. MODIFY QUANTITY	0.01	1.11
12. PROCESS PAYMENT	0.02	1.15
23. PREPARE REPORT	0.03	1.27
17. CLAIMS/APPEALS	0.12	1.28
13F. MODIFY QA REQMT.	0.00	1.30
2. PRE POST-AWARD CONF.	0.04	1.31
13J. MODIFY "ALL OTHER"	0.01	1.40
4. POST-AWARD LETTER	0.00	1.57
6. "STOP WORK" ORDER	0.01	1.62
13B. MODIFY MATL/DESCRIP.	0.01	1.64
7. ASSESS LIQ. DAMAGES	0.00	1.74
13I. MODIFY DEL. DEST.	0.00	1.76
16. PROCESS GFE/GFM	0.00	3.51
13C. MODIFY INSP./ACCEPT.	0.01	4.62



Table 4.13 should be reviewed in context with Tables 4.1 and 4.7. For example, "24. SERVICE CONTRACTS" has a high percent of the overall workload (20%) by having an above average reading for "percent of total contracts affected" (11%), and a high "labor hours per contract" reading of 14.8. On the other hand, despite having a high "labor hours per contract" reading of 40.4 hours, "20. TERM. FOR DEFAULT" has a low "percent of total labor hours" reading of 2% due to a low "percent of contracts affected" reading of 0%.

Table 4.13 points out that the workload at NSCs appears to be dominated by a few functions. The six functions of "24.SERVICE CONTRACTS," "17. CLAIMS/APPEALS," "22. CONTRACT CLOSE OUT," "1. CONTRACT REVIEW," "8. MONITOR PERFORMANCE" and "5. REVIEW PROGRESS" account for 64% of the average workload at an NSC.

Table 4.14, with a deviation percent range of 43% to 462%, shows that there is still too much deviation in the calculations in Table 4.14 to permit any type of analysis other than for general trends.

## 2. NRCC Data

Tables 4.15 and 4.16 display data for the NRCCs.

Table 4.15 shows that the workload at an NRCC also appears to be centered on a few functions. The five functions of "8. MONITOR PERFORMANCE," "14. ADMIN CHANGE MOD.," "24. SERVICE CONTRACTS," "13A. MODIFY PRICE" and "5. REVIEW PROGRESS" account for 53% of the average workload. While many

TABLE 4.15

NRCC DATA  
ESTIMATED PERCENT OF TOTAL  
LABOR HOURS EXPENDED PER FUNCTION

FUNCTION	PERCENT OF TOTAL LABOR HOURS EXPENDED	DEVIATION PERCENT
8. MONITOR PERFORMANCE	0.25	0.54
14. ADMIN CHANGE MOD.	0.07	0.23
24. SERVICE CONTRACTS	0.07	0.73
13A. MODIFY PRICE	0.07	0.74
5. REVIEW PROGRESS	0.07	0.81
12. PROCESS PAYMENT	0.06	1.23
23. PREPARE REPORT	0.05	1.49
17. CLAIMS/APPEALS	0.04	0.50
13B. MODIFY MATL/DESCRIP.	0.04	0.54
1. CONTRACT REVIEW	0.04	0.86
20. TERM. FOR DEFAULT	0.03	1.02
13J. MODIFY "ALL OTHER"	0.02	0.62
10. "CURE" NOTICE	0.02	0.65
19. TERM. FOR CONV.	0.02	0.67
3. POST-AWARD CONF.	0.02	0.70
2. PRE POST-AWARD CONF.	0.02	0.73
15. CHANGE ORDER MOD.	0.02	0.82
13E. MODIFY PERF. PERIOD	0.02	0.84
22. CONTRACT CLOSE OUT	0.01	0.46
13H. MODIFY QUANTITY	0.01	0.65
4. POST-AWARD LETTER	0.01	0.74
11. "SHOW CAUSE" NOTICE	0.01	1.02
6. "STOP WORK" ORDER	0.01	1.28
13G. CHANGE COTR	0.00	0.00
13D. ADD/DELETE ITEMS	0.00	0.26
18. SHIPM. PROBLEMS	0.00	0.73
13C. MODIFY INSP./ACCEPT.	0.00	0.85
16. PROCESS GFE/GFM	0.00	1.21
13F. MODIFY QA REQMT.	0.00	1.26
13I. MODIFY DEL. DEST.	0.00	1.29
21. BANKRUPT./INSOLV.	0.00	1.29
7. ASSESS LIQ. DAMAGES	0.00	1.37
9. VISITS CONTRACTOR	0.00	1.52

TABLE 4.16

NRCC DATA  
ESTIMATED PERCENT OF TOTAL  
LABOR HOURS EXPENDED PER FUNCTION  
(BY DEVIATION PERCENT)

FUNCTION	PERCENT OF TOTAL LABOR HOURS EXPENDED	DEVIATION PERCENT
13G. CHANGE COTR	0.00	0.00
14. ADMIN CHANGE MOD.	0.07	0.23
13D. ADD/DELETE ITEMS	0.00	0.26
22. CONTRACT CLOSE OUT	0.01	0.46
17. CLAIMS/APPEALS	0.04	0.50
8. MONITOR PERFORMANCE	0.25	0.54
13B. MODIFY MATL/DESCRIP.	0.04	0.54
13J. MODIFY "ALL OTHER"	0.02	0.62
10. "CURE" NOTICE	0.02	0.65
13H. MODIFY QUANTITY	0.01	0.65
19. TERM. FOR CONV.	0.02	0.67
3. POST-AWARD CONF.	0.02	0.70
24. SERVICE CONTRACTS	0.07	0.73
2. PRE POST-AWARD CONF.	0.02	0.73
18. SHIPM. PROBLEMS	0.00	0.73
13A. MODIFY PRICE	0.07	0.74
4. POST-AWARD LETTER	0.01	0.74
5. REVIEW PROGRESS	0.07	0.81
15. CHANGE ORDER MOD.	0.02	0.82
13E. MODIFY PERF. PERIOD	0.02	0.84
13C. MODIFY INSP./ACCEPT.	0.00	0.85
1. CONTRACT REVIEW	0.04	0.86
20. TERM. FOR DEFAULT	0.03	1.02
11. "SHOW CAUSE" NOTICE	0.01	1.02
16. PROCESS GFE/GFM	0.00	1.21
12. PROCESS PAYMENT	0.06	1.23
13F. MODIFY QA REQMT.	0.00	1.26
6. "STOP WORK" ORDER	0.01	1.28
21. BANKRUPT./INSOLV.	0.00	1.29
13I. MODIFY DEL. DEST.	0.00	1.29
7. ASSESS LIQ. DAMAGES	0.00	1.37
23. PREPARE REPORT	0.05	1.49
9. VISITS CONTRACTOR	0.00	1.52

of the top functions for NRCCS are similar to the top NSC functions, a major difference is that NRCCs rate the modification functions (13A to 15) as being 25% of the average workload, while NSCs state only 13% of the average workload concerns modification functions.

The deviations stated in Table 4.16 show that there is a great deal of deviation between NRCCs as to the organization of the workload.

### 3. Total Data

Tables 4.17 and 4.18 exhibit the workload data for all commands combined.

Table 4.17 again points out the fact that a few functions account for a large portion of the workload. The four functions of "8. MONITOR PERFORMANCE," "24. SERVICE CONTRACTS," "17. CLAIMS/APPEALS" and "1. CONTRACT REVIEW" account for 44% of the total workload for all commands. At the low end of the scale, 17 of the 33 functions account for only 17% of the total workload.

Table 4.18 depicts a deviation range of 58% to 1266%. This deviation range reflects the differences between commands as to how the functions relate to the total contract administration workload. While general workload trends can be identified in Table 4.17, the deviation factors in Table 4.18 are a reminder that these trends are only general approximations. Additional research would be required to attempt to develop trends of greater detail.

TABLE 4.17

TOTAL DATA  
ESTIMATED PERCENT OF TOTAL  
LABOR HOURS EXPENDED PER FUNCTION

FUNCTION	NSC	NRCC	TOTAL
8. MONITOR PERFORMANCE	0.08	0.25	0.18
24. SERVICE CONTRACTS	0.20	0.07	0.13
17. CLAIMS/APPEALS	0.12	0.04	0.07
1. CONTRACT REVIEW	0.08	0.04	0.06
22. CONTRACT CLOSE OUT	0.10	0.01	0.05
5. REVIEW PROGRESS	0.06	0.07	0.05
13A. MODIFY PRICE	0.02	0.07	0.05
14. ADMIN CHANGE MOD.	0.02	0.07	0.05
12. PROCESS PAYMENT	0.02	0.06	0.05
23. PREPARE REPORT	0.03	0.05	0.04
2. PRE POST-AWARD CONF.	0.04	0.02	0.03
13E. MODIFY PERF. PERIOD	0.03	0.02	0.03
3. POST-AWARD CONF.	0.03	0.02	0.03
13B. MODIFY MATL/DESCRIP.	0.01	0.04	0.03
20. TERM. FOR DEFAULT	0.02	0.03	0.02
19. TERM. FOR CONV.	0.02	0.02	0.02
13J. MODIFY "ALL OTHER"	0.01	0.02	0.01
10. "CURE" NOTICE	0.01	0.02	0.01
6. "STOP WORK" ORDER	0.01	0.01	0.01
13H. MODIFY QUANTITY	0.01	0.01	0.01
11. "SHOW CAUSE" NOTICE	0.01	0.01	0.01
13D. ADD/DELETE ITEMS	0.01	0.00	0.01
15. CHANGE ORDER MOD.	0.00	0.02	0.01
4. POST-AWARD LETTER	0.00	0.01	0.01
13C. MODIFY INSP./ACCEPT.	0.01	0.00	0.00
13G. CHANGE COTR	0.01	0.00	0.00
18. SHIPM. PROBLEMS	0.00	0.00	0.00
21. BANKRUPT./INSOLV.	0.00	0.00	0.00
7. ASSESS LIQ. DAMAGES	0.00	0.00	0.00
9. VISITS CONTRACTOR	0.00	0.00	0.00
13F. MODIFY QA REQMT.	0.00	0.00	0.00
13I. MODIFY DEL. DEST.	0.00	0.00	0.00
16. PROCESS GFE/GFM	0.00	0.00	0.00

TABLE 4.18

TOTAL DATA  
ESTIMATED PERCENT OF TOTAL  
LABOR HOURS EXPENDED PER FUNCTION  
(BY DEVIATION PERCENT)

FUNCTION	NSC	NRCC	TOTAL
5. REVIEW PROGRESS	0.43	0.81	0.58
14. ADMIN CHANGE MOD.	0.82	0.23	0.60
19. TERM. FOR CONV.	0.73	0.67	0.69
8. MONITOR PERFORMANCE	0.98	0.54	0.70
10. "CURE" NOTICE	0.69	0.65	0.75
13B. MODIFY MATL/DESCRIP.	1.64	0.54	0.77
24. SERVICE CONTRACTS	0.52	0.73	0.79
1. CONTRACT REVIEW	0.64	0.86	0.79
18. SHIPM. PROBLEMS	0.84	0.73	0.80
11. "SHOW CAUSE" NOTICE	0.55	1.02	0.81
13A. MODIFY PRICE	1.11	0.74	0.81
20. TERM. FOR DEFAULT	0.68	1.02	0.82
15. CHANGE ORDER MOD.	0.72	0.82	0.90
13J. MODIFY "ALL OTHER"	1.40	0.62	0.94
3. POST-AWARD CONF.	1.05	0.70	0.98
12. PROCESS PAYMENT	1.15	1.23	1.13
13H. MODIFY QUANTITY	1.11	0.65	1.17
22. CONTRACT CLOSE OUT	0.51	0.46	1.19
13E. MODIFY PERF. PERIOD	1.10	0.84	1.24
2. PRE POST-AWARD CONF.	1.31	0.73	1.24
23. PREPARE REPORT	1.27	1.49	1.31
6. "STOP WORK" ORDER	1.62	1.28	1.37
13D. ADD/DELETE ITEMS	0.87	0.26	1.49
4. POST-AWARD LETTER	1.57	0.74	1.55
13I. MODIFY DEL. DEST.	1.76	1.29	1.55
13G. CHANGE COTR	0.75	0.00	1.76
17. CLAIMS/APPEALS	1.28	0.50	1.82
9. VISITS CONTRACTOR	1.06	1.52	1.92
13F. MODIFY QA REQMT.	1.30	1.26	2.32
7. ASSESS LIQ. DAMAGES	1.74	1.37	3.12
21. BANKRUPT./INSOLV.	0.54	1.29	4.21
13C. MODIFY INSP./ACCEPT.	4.62	0.85	5.53
16. PROCESS GFE/GFM	3.51	1.21	12.66

Table 4.19 presents, in a ranking format, consolidated information for all commands in regards to the three processes used. In this format it is easier to identify the relative ranking of each function for each of the three ways that the functions were analyzed.

The ranking format clearly identifies for each function the impact of the range and depth. Of the top ten functions that accounted for 73% of the total workload, eight were ranked high in terms of percent of contracts affected (range). Of those eight functions, seven were ranked low in terms of labor hours per contract (depth). The contract administration workload appears to emphasize the range, vice the depth, of a function. Despite claims that unique situations (lengthy appeals process) can be very time consuming, the vast majority of labor hours are used toward functions that require a low number of hours per contract, but that affect a wide range of contracts.

#### E. ESTIMATED VS. ACTUAL LABOR

All functions were analyzed in regards to the estimated labor derived by each command. Historical data were to be used whenever available. When historical data were not available, each command was to derive an estimate based on management judgement and experience.

To determine if the labor hours estimated by each command were realistic, they were compared to the actual labor hours

TABLE 4.19

TOTAL DATA  
RELATIVE RANKING  
(RANKED 1 TO 33)

FUNCTION	PERCENT OF TOTAL CONTRACTS AFFECTED	LABOR HOURS PER CONTRACT	PERCENT OF TOTAL LABOR
8. MONITOR PERFORMANCE	1	17	1
24. SERVICE CONTRACTS	8	4	2
17. CLAIMS/APPEALS	26	1	3
1. CONTRACT REVIEW	3	26	4
5. REVIEW PROGRESS	2	28	5
14. ADMIN CHANGE MOD.	5	27	6
13A. MODIFY PRICE	12	6	7
12. PROCESS PAYMENT	7	16	8
22. CONTRACT CLOSE OUT	6	18	9
23. PREPARE REPORT	4	29	10
13B. MODIFY MATL/DESCRIP.	11	13	11
3. POST-AWARD CONF.	16	9	12
13E. MODIFY PERF. PERIOD	9	19	13
2. PRE POST-AWARD CONF.	15	8	14
19. TERM. FOR CONV.	24	3	15
20. TERM. FOR DEFAULT	25	2	16
10. "CURE" NOTICE	17	10	17
11. "SHOW CAUSE" NOTICE	18	14	18
15. CHANGE ORDER MOD.	13	20	19
13J. MODIFY "ALL OTHER"	14	21	20
13H. MODIFY QUANTITY	19	15	21
6. "STOP WORK" ORDER	27	11	22
13D. ADD/DELETE ITEMS	21	24	23
4. POST-AWARD LETTER	10	33	24
18. SHIPM. PROBLEMS	28	25	25
13I. MODIFY DEL. DEST.	29	23	26
13G. CHANGE COTR	20	30	27
9. VISITS CONTRACTOR	30	7	28
13F. MODIFY QA REQMT.	22	32	29
21. BANKRUPT./INSOLV.	31	12	31
7. ASSESS LIQ. DAMAGES	32	5	31
13C. MODIFY INSP./ACCEPT.	23	31	32
16. PROCESS GFE/GFM	33	22	33



reported in Cost Account 271C for FY 88. Cost Account 271C is for contract administration labor hours. Table 4.20 gives the data for estimated labor vice the actual CA 271C labor.

TABLE 4.20  
LABOR HOURS  
(ESTIMATED VS. ACTUAL)

COMMAND	ESTIMATED HOURS	ACTUAL HOURS CA 271C	ESTIMATE/ ACTUAL RATIO
NSC1	8,119	13,620	0.60
NSC2	8,862	10,443	0.85
NSC3	26,046	32,678	0.80
NSC4	8,062	7,405	1.09
NSC5	13,973	16,069	0.87
NSC6	889	1,832	0.49
NSC TOTAL	65,951	82,047	0.80
NRCC1	32,685	30,000	1.09
NRCC2	32,624	23,880	1.37
NRCC3	29,249	27,000	1.08
NRCC TOTAL	94,558	80,880	1.17
TOTAL	160,509	162,927	0.99

An initial theory was that the commands would give high estimates, as the data may be subjective and biased toward inflating the command productivity, and by a desire to account for what a command "should be doing" vice "actual doing." Yet the estimated labor/actual labor ratio is below 1.00 for the majority of the NSCs. It appears that the NSCs took a predominantly conservative view of the labor hours expended.

The NRCCs overall ratio of 1.17, which is predominantly skewed by one command, may be more in line with the initial theory. Nevertheless, it is judged by the researcher that a NSC ratio of .80, a NRCC ratio of 1.17 and an overall ratio of .99 is satisfactory when dealing with estimates, and does not negatively impact the analyses that have been done in Chapter IV. While the ratios are not ideal, they are close enough to 1.00 to permit the establishment of general trends.

#### F. SUMMARY

This chapter has analyzed 33 functions of contract administration for NSCs and NRCCs, as well as for NSCs and NRCCs combined. The data were analyzed in three ways: by the percent of contracts affected, by the number of labor hours per contract, and by the percent of the total workload expended.

Chapter V will summarize the results of the analyses, critique the collection data process, and present conclusions and recommendations.

## V. CONCLUSIONS AND RECOMMENDATIONS

### A. GENERAL

The Productive Unit Resourcing (PUR) system currently does not account for contract administration efforts. The current PUR system determines budgetary productive units based on the number of contracts awarded, which does not reflect contract administration efforts.

This research has attempted to gather raw data from NFCAs in order to discover the functional structure of the contract administration workload. To be able to address the ultimate objective of how to incorporate contract administration efforts into the PUR model, it is first necessary to address the fundamental issue of how NFCAs are similar and different in regards to their workload.

Raw data accumulated from NFCAs were both historical and based on estimates. These data were then studied using three techniques: percent of contracts affected (depth), labor hours per contract (depth), and percent of total labor hours (range and depth). The analyses attempted to identify and highlight major quantifiable trends in the data. The trends may be useful toward developing a standardized measurement for contract administration efforts that can be incorporated into the PUR model.

## B. CONCLUSIONS

This research effort has led to several conclusions in regards to quantifying contract administration functions.

### 1. Conclusion 1

The basic process of documenting and describing a contract administration function is very complex, and calls for a very detailed and specific description if ambiguities and confusion are going to be minimized.

The survey (Appendix F) was initially based on an Operational Task List developed by an NSC that described all functions performed in their Contract Administration division. The data were organized into 33 separate functions, and then sent to NAVSUP and various NSCs for review. Even receiving and incorporating feedback into the survey, the results from the survey indicate that a clear meaning of "contract administration" is difficult to define. For example, survey participants required clarification on several significant functions. Several survey participants required clarification as to the difference between "5. REVIEW PROGRESS" and "8. MONITOR PERFORMANCE." The majority of the survey participants also felt that "24. SERVICE CONTRACTS" should have been broken down to reflect ranges of contract prices.

While the questionnaire stated some action items that pertained to each function, it did not state all action items. A more detailed analysis would require additional documentation as to the action items that are covered by each

function. Yet at some point this would result in a lengthy, burdensome and unmanageable survey. A balance must be found between the clarification of the functions and the amount of paperwork required.

## 2. Conclusion 2

NFCAs do not routinely process, and therefore do not have access to, data that give a detailed quantifiable overview of contract administration functions.

Data collected by the survey were to be predominantly historical, and the use of supervisory estimates, based on experience and judgement, was to be secondary. The actual data collected were predominantly estimates, with the use of historical data being minimal.

The survey was originally sent to seven NSCs, two Navy Inventory Control Points (ICPs), and three NRCCs. Due to the lack of historical data, and even the ability to derive estimates, one NSC and both ICPs were unable to complete the survey and were excluded as survey participants.

The majority of the survey participants were initially apprehensive about having their estimates included in the data base, as they were concerned that their input would distort the detailed data being presented by the other survey participants. Concerns were alleviated when it was explained to them that the detailed data from the other survey participants were also for the most part estimates.

### 3. Conclusion 3

Initial estimates are of limited value when attempting to derive quantifiable contract administration functions.

The use of estimates identified those contract administration functions that affected the most contracts, used the most labor hours per contract, and that accounted for the greatest percentage of the total contract administration workload. Initial estimates also identified functions that may be dissimilar due to command structure. Beyond this, the estimates did not highlight any significant trends between functions. While estimates were helpful in developing an initial "big picture," they lacked credibility for any detailed analysis to be seriously considered. This was primarily due to Conclusion 4.

### 4. Conclusion 4

While estimates are useful to gather initial data, the deviation factors of the estimates limit and undermine the credibility of any detailed analysis of the data.

The deviation percent for the functions was too great to attempt further detailed analysis. Looking at the deviation percent for all commands, the percent of contracts affected (50% to 714%), labor hours per contract (51% to 387%) and percent of the total labor hours expended (58% to 553%) all had ranges that reflected the fact that most commands developed subjective estimates.

It was hoped that estimates might possibly highlight key trends that had little deviation, and to use this information as a "stepping stone" toward the ultimate goal of deriving quantifiable contract administration functions. This did not prove to be the case. The high deviations reflected the consolidation of dissimilar information, as commands interpreted the questionnaire differently and responded with subjective estimates.

#### C. RECOMMENDATIONS

As a result of the conclusions, the following recommendations are made.

##### 1. Recommendation 1

Do not use the derived estimates as a means to quantify contract administration functions for the PUR model.

Due to the differing interpretations of the definitions of the functions, the lack of credible historical data and the unacceptable deviation ranges, estimates that would establish a PUR standard could not be accurately quantified and a model could not be developed.

##### 2. Recommendation 2

Efforts to determine the cost effectiveness of standardizing, collecting and recording the necessary data to develop a PUR model for contract administration should be continued. However, the efforts should initially be concentrated on a narrower range of functions.

This study has identified many of the functions that account for the largest portion of contract administration. Selected functions should be reviewed more closely to determine the feasibility of deriving a standard functional definition, as well as how a database could be established to ultimately define an appropriate production unit system for contract administration. While initial estimates have not proven to be feasible in developing a PUR model, further research is required.

### 3. Recommendation 3

Alternative approaches for including contract administration efforts into the PUR model should be examined.

A possible alternative approach is to maintain a ratio between negotiators/buyers and contract administrators. The budget requirement for contract administration would, therefore, be based on the number of negotiators/buyers.

For those organizations for which the negotiators/buyers perform contract administration duties, a percent factor vice a ratio factor would be used.

For both approaches it would have to be determined whether or not the factors were independent of the PUR model.

## D. REVIEW OF RESEARCH QUESTIONS

Based on the conclusions and recommendations, summarization responses will now be provided to the two



secondary and one primary research questions addressed in Chapter I.

**SECONDARY QUESTION 1: What contract administration functions can be effectively quantified and recorded?**

The data collected did not identify any function that could be effectively quantified and recorded. No major function had a significant low deviation factor for any of the three techniques used to examine the data. Estimates proved to have limited usefulness, and did not provide the necessary link toward quantifying functions. Estimates are of limited value and credibility, and provide no major insight toward quantifying the contract administration functions. The contract administration functions that account for the majority of the workload can not presently be effectively quantified and recorded. Only subjective estimates are available.

**SECONDARY QUESTION 2: Do the quantifiable contract administration functions exhibit significant correlations amongst the NFCAs?**

Secondary Question 1 stated that currently no contract administration functions are quantifiable. Yet there still were some general similarities between NFCAs in regards to contract administration functions. Chapter IV showed that NSCs and NRCCs were similar as to which functions affected the most contracts, required the most labor hours per contract, and accounted for the largest percent of the labor hours

expended. The credibility of the similarities are limited by the high deviation percent.

PRIMARY QUESTION: Is it feasible to develop a standardized PUR model that accurately reflects the contract administration functions performed at NFCAs?

As the information required to quantify a contract administration function is not maintained in the NFCAs databases, it is the researcher's opinion that it is currently not feasible to attempt to develop a PUR model that accurately reflects the contract administration functions performed at NFCAs. This reasoning is based on two central factors. First, the questionnaire has pointed out the difficulty encountered when attempting to even define a basic contract administration function. It was found that no two commands totally agree on what constitutes any one function, or how that function is performed. Second, an initial attempt to quantify functions has accented the administrative efforts required. It would require contract administrators spending more time in documentation than actually performing contract administration work. Even if quantifying contract administration efforts were possible, in the end it may still not be desirable to incorporate it into a PUR system from a cost-effective perspective.

#### E. AREAS OF FURTHER RESEARCH

The scope of this study covered a wide range of NFCAs, and addressed all possible contract administration functions that could be identified. A possible study area is to limit the scope to one command, and review the few contract administration functions identified in Chapter IV that account for the largest percent of the total labor hours expended. A detailed analysis of the reporting procedures may determine cost-effective ways to quantify contract administration. While this would not account for all contract administration functions, it could be a method of determining the feasibility of including contract administration in a PUR model.

#### F. SUMMARY

This research has shown that it is currently not feasible to quantify contract administration functions and incorporate them into a PUR model. However, it is possible that the data base, and the reporting system, could be modified so that it is feasible. The question of whether or not this modification would be cost effective is beyond the scope of this study, and requires additional detailed research. It is the researcher's personal opinion that follow-on studies of this nature will document the futility of trying to quantify contract administration functions, and will direct further research towards alternative approaches outside the framework of a PUR model.

This may include such alternative approaches as establishing a ratio between the number of buyers and contract administrators, or assigning a contract administration "percent" to the buyer's workload for those commands that have a "cradle to grave" structure.

Researching these questions will not only determine the costs and benefits of attempting to quantify contract administration functions, but will assist efforts to ascertain whether or not a PUR model is the optimum means for relating procurement productivity to work force funding.

## APPENDIX A

### QUESTIONNAIRE/SURVEY COVER LETTER

SCOPE As this survey may require estimates based on experience and judgement, it should be completed by someone at the supervisory level.

#### DATA

REQMT: Each command is asked to address three questions that pertain to Contract Administration functions (consolidated list provided on the next page), along with answering a few general questions. You are asked to quantify, to the best of your ability, how these functions affect your workload. HANDWRITTEN RESPONSES WILL BE FINE.

The three questions that pertain to each function are as follows:

#### 1. "ESTIMATED NUMBER OF CONTRACTS AFFECTED":

How many contracts processed (i.e., established, monitored, closed out) in FY 88 did this particular function apply to? Each stated function should be addressed independently from other functions, using valid/documented data whenever possible. The attempt is to determine how much of your yearly workload for FY 88 was affected by each of the functions. Some functions will cover all contracts/purchases, while others will be unique. It is understood that documentation may not be readily available to support your responses. In such situations use your experience and judgment to provide your best answer. A range is permissible, but the maximum number should be no greater than 120% of the minimum number.

#### 2. "ESTIMATED MANHOURS PER AFFECTED CONTRACT/PURCHASE":

For each function estimate the total manhours required to complete the function per one contract, including all direct supervisory and clerical manhours when applicable. Data should only reflect Cost Account 271C. Do not include indirect labor costs from Cost Account 271E (ie overhead). If estimating, use a range with the maximum number no greater than 120% of the minimum number.

3. "FEEDBACK":

Available space for addressing the following questions: Is the general function too general, resulting in an estimate with a large range? Should the function be subdivided into more specific areas? Is the function as stated too ambiguous? Is the function as described somewhat irrelevant in regards to manpower, as it has been mechanized? Were there any assumptions you made to calculate the requested information?

CONTACT

POINT: It is requested that your Point of Contact call me at 408-649-8115 at his/her earliest convenience.

DUE

DATE

My goal is to receive all input by 15 April, allowing me time to analyze the data, provide feedback to you, and get your opinions as to how to interpret the data.  
Return address:

LCDR JAMES BAKER  
441 MONROE ST. APT 6  
MONTEREY CA 93940  
(408) 649-8115

## APPENDIX B

### LISTING OF CONTRACT ADMINISTRATION FUNCTIONS

#### CONTRACT ADMINISTRATION

1. Performs review and analysis of contract.
2. Prepares for post-award conference.
3. Conducts/attends post-award conference.
4. Prepares a post-award letter.
5. Reviews contract progress.
6. Issues stop work order.
7. Assesses liquidated damages.
8. Monitors contractor performance.
9. Visits contractor's facility
10. Issues cure notice.
11. Issues show cause notice.
12. Processes payment requests.
- 13A. Contract modification--price increase/decrease.
- 13B. Contract modification--change description/material.
- 13C. Contract modification--change inspection/acceptance.
- 13D. Contract modification--add/delete line item.
- 13E. Contract modification--extend delivery/period of performance.
- 13F. Contract modification--change QA requirement.
- 13G. Contract modification--change COTR.
- 13H. Contract modification--change quantity.
- 13I. Contract modification--change delivery destination.
- 13J. Contract modification--"all other".
14. Processes administrative change modifications.
15. Processes change order modification.
16. Processes GFE/GFM issues.
17. Administers contractor claims and appeals.
18. Processes lost/damaged shipment, overage or reject.
19. Terminates contract for convenience.
20. Terminates contract for default.
21. Bankruptcy/insolvency proceedings.
22. Closes contracts.
23. Reports preparation.
24. Service Contracts.

## APPENDIX C

### CONTRACT ADMINISTRATION FUNCTIONS

1. Function: PERFORMS REVIEW AND ANALYSIS OF CONTRACT. Includes (BUT NOT LIMITED TO):

Action Items:

- A. Reviews contract for assignment, completeness, and familiarity by researching contract clauses, history of negotiation, and contract specification.
- B. Verifies content of contract by utilizing index sheet.
- C. Identifies contract discrepancy and determines whether a modification is required. (But does not make mod at this time.)
- D. Checks for COTR appointment letter, if required, and assures COTR is identified in contract.
- E. Ascertains requirement for insurance, if needed and current certificate is not available, and prepares letter requesting submission prior to commencement of work.
- F. Annotates contract suspense card with the date of the next required action.
- G. Loads contract into contract administration records in computer.

ESTIMATED NUMBER OF CONTRACTS AFFECTED:

ESTIMATED MANHOURS PER AFFECTED CONTRACT:

FEEDBACK:

2. Function: PREPARES FOR POST-AWARD CONFERENCE. Includes (BUT NOT LIMITED TO):

Action Items:

- A. Notifies government personnel of preliminary meeting and conducts meeting to assure that the Government position on all matters is established.
- B. Schedules conference by contacting and coordinating with all participants involved to establish a time and place for conference.
- C. Gathers necessary information to prepare agenda, including the preparation of any documents to be presented to contractor.

ESTIMATED NUMBER OF CONTRACTS AFFECTED:

ESTIMATED MANHOURS PER AFFECTED CONTRACT:

FEEDBACK:

3. Function: CONDUCTS/ATTENDS POST-AWARD CONFERENCE. Includes (BUT NOT LIMITED TO):

Action Items:

- A. Provides guidance to clarify contractor's responsibility, rights of the government, and contract specifications.
- B. Briefs contractor on fire, security, and safety requirements as specified in contract.
- C. Prepares a summary report of conference proceedings, finalizes any necessary documents, provides copies to appropriate personnel and files copy in contract file.

ESTIMATED NUMBER OF CONTRACTS AFFECTED:

ESTIMATED MANHOURS PER AFFECTED CONTRACT:

FEEDBACK:



4. Function: PREPARES A POST-AWARD LETTER for less complex contracts in lieu of a post-award conference.

ESTIMATED NUMBER OF CONTRACTS AFFECTED:

ESTIMATED MANHOURS PER AFFECTED CONTRACT:

FEEDBACK:

5. Function: REVIEWS CONTRACT PROGRESS. Includes (BUT NOT LIMITED TO):

Action Items:

- A. Receives suspense card from tickler file and telephones contractor/DCAS to inquire as to whether contractor will perform on schedule.
- B. Obtains and reviews contractor's proposed progress schedule. If approval is required, receives approval from specified authority.
- C. Receives and reviews the progress report from DCAS and compares it with progress schedule.
- D. Resolves discrepancy between progress report and progress schedule, and files progress report in contract file.

ESTIMATED NUMBER OF CONTRACTS AFFECTED:

ESTIMATED MANHOURS PER AFFECTED CONTRACT:

FEEDBACK:

6. Function: ISSUES STOP WORK ORDER, when complications arise.

ESTIMATED NUMBER OF CONTRACTS AFFECTED:

ESTIMATED MANHOURS PER AFFECTED CONTRACT:

FEEDBACK:

7. Function: ASSESSES LIQUIDATED DAMAGES when performance requirements are not met:

ESTIMATED NUMBER OF CONTRACTS AFFECTED:

ESTIMATED MANHOURS PER AFFECTED CONTRACT:

FEEDBACK:

8. Function: MONITORS CONTRACTOR PERFORMANCE. Includes (BUT NOT LIMITED TO):

Action Items:

- A. Receives and reviews insurance certificate. Includes time to review certification of coverage letter.
- B. Receives and reviews acknowledgement of subcontractor when required.
- C. Resolves any discrepancy identified during review of insurance certificate and subcontractor.

- D. Reviews DD 254 and updates when appropriate.
- E. Obtains feedback on contractor performance by coordinating with COTR, and reviews performance with contractor.
- F. Documents irregularity concerning contractor or contract performance.
- G. Coordinates with contractor, customer, or worker to resolve complaints. Includes time to refer complainant to the proper authority.

ESTIMATED NUMBER OF CONTRACTS AFFECTED:

ESTIMATED MANHOURS PER AFFECTED CONTRACT:

FEEDBACK:

9. Function: VISITS CONTRACTOR'S FACILITY to ensure contractor compliance with established contract provisions.

ESTIMATED NUMBER OF CONTRACTS AFFECTED:

ESTIMATED MANHOURS PER AFFECTED CONTRACT:

FEEDBACK:

10. Function: ISSUES CURE NOTICE when contractor fails to comply with contract provision, and reviews contractor's reply to determine action required. Sends copy of documented action to customer and appropriate authorities.

ESTIMATED NUMBER OF CONTRACTS AFFECTED:

ESTIMATED MANHOURS PER AFFECTED CONTRACT:

FEEDBACK:

11. Function: ISSUES SHOW CAUSE NOTICE when discrepancy from cure notice is not corrected within ten days, and reviews contractor's reply to determine action required. Sends copy of documented action to customer and appropriate authorities.

ESTIMATED NUMBER OF CONTRACTS AFFECTED:

ESTIMATED MANHOURS PER AFFECTED CONTRACT:

FEEDBACK:

12. Function: PROCESSES PAYMENT REQUESTS. Includes (BUT NOT LIMITED TO):

Action Items:

- A. Receives and reviews contractor invoice to determine amount of requested payment.
- B. Determines the amount to be paid the contractor by verifying contract completion percentage, and the amount to be retained by the government.

- C. Reviews public pay voucher and states all required information, including type of payment and accounting classification. Obtains the approval and signature of the Contracting Officer, forwards signed voucher to disbursing activity, receives paid voucher, and files in contract file.
- D. Resolving payment problems by consolidating key paperwork (ie receiving documentation, etc..)

ESTIMATED NUMBER OF CONTRACTS AFFECTED:

ESTIMATED MANHOURS PER AFFECTED CONTRACT:

FEEDBACK:

13. Function: PROCESSES NEW SCOPE MODIFICATIONS. Includes (BUT NOT LIMITED TO):

Action Items:

- A. Places written documentation in contract file to clearly establish why modification is necessary.
- B. Documents in writing why the requirement should not be treated as a new contract.
- C. Ensures additional funds are available if the modification requires an increase in funds expenditure.
- D. Determines type of modification to be used.
- E. Selects proper authority for the modification.
- E. Receives and evaluates contractor's cost estimate.
- F. Develops sufficient pricing data for negotiations, and determines fair and reasonable price.
- G. Prepares pre-negotiation business clearance to show Government objective, and submits to Contract Review Board as appropriate.
- H. Conducts necessary negotiation.
- I. Prepares post negotiation memo and submits to Contract Review Board for approval.
- J. Processes supplemental agreement modification with prior negotiation, and maintains supplemental agreement in suspense until the contractor's signature is obtained.
- K. Obtains contracting officer review to ensure compliance and accuracy.
- L. Ensure computer record is updated.

# OF AFFECTED  
CONTRACTS:

MANHOURS PER  
CONTRACT:

- 13A. PRICE INCREASE/DECREASE
- 13B. CHANGE DESCRIPTION/MATERIAL
- 13C. CHANGE INSPECTION/ACCEPTANCE
- 13D. ADD/DELETE LINE ITEM
- 13E. EXTEND DELIVERY/PERIOD OF PERFORMANCE
- 13F. CHANGE QA REQUIREMENT
- 13G. CHANGE COTR
- 13H. CHANGE QUANTITY
- 13I. CHANGE DELIVERY DESTINATION.
- 13J. "ALL OTHER" (MISC) (ONLY IF REQUIRED)

(NOTE - ADMIN CHANGE MOD ADDRESSED IN # 14,  
CHANGE ORDER MOD IN # 15)

FEEDBACK:

14. Function: PROCESSES ADMINISTRATIVE CHANGE MODIFICATION necessary to correct administrative error.  
Forwards to Contracting Officer for review.

ESTIMATED NUMBER OF CONTRACTS AFFECTED:

ESTIMATED MANHOURS PER AFFECTED CONTRACT:

FEEDBACK:

15. Function: PROCESSES CHANGE ORDER MODIFICATION when time will not permit prior negotiation.  
Forwards copy to Contracting Officer for review.

ESTIMATED NUMBER OF CONTRACTS AFFECTED:

ESTIMATED MANHOURS PER AFFECTED CONTRACT:

FEEDBACK:

16. Function: PROCESSES GFE/GFM ISSUES. Includes (BUT NOT LIMITED TO):

Action Items:

- A. Delay in furnishing GFM/GFE.
- B. Delay in returning GFM/GFE.
- C. Damaged GFM/GFE furnished by the government.
- D. Request for rent-free use of GFM/GFE.
- E. GFM/GFE damaged by the contractor.

ESTIMATED NUMBER OF CONTRACTS AFFECTED:

ESTIMATED MANHOURS PER AFFECTED CONTRACT:

FEEDBACK:

17. Function: ADMINISTERS CONTRACTOR CLAIMS AND APPEALS against the government. Includes (BUT NOT LIMITED TO):

Action Items:

- A. Receives and reviews contractor claim to determine basis for claim, and forwards letter of claim to customer.
- B. Receives and reviews customer comments as to validity of claim.
- C. Meets with contractor to negotiate price if claim is honored, and assures availability of funds. Prepares price negotiation memorandum and modification.
- D. Drafts final decision letter, submits to contracting officer, edits, approves, and ensembles claim package and forwards to legal counsel for review.
- E. Reviews legal counsel's comments. Based on comments, writes contracting officer final decision letter, prepares memorandum setting forth the basis of contracting officer's final decision, and forwards copy of final decision to contractor.
- F. Reviews contractor's appeal, if submitted, and forwards appeal to the appropriate agency.
- G. Assembles required data and submits to ASBCA and contractor, to inform them of status of appeal. Retains copy for contract file.
- H. When required, appears as witness at pre-hearing brief and actual trial.
- I. If ruled in favor of contractor, receives funds and prepares negotiation memorandum and modification. Processes approval for final payment.

ESTIMATED NUMBER OF CONTRACTS AFFECTED:

ESTIMATED MANHOURS PER AFFECTED CONTRACT:

FEEDBACK:

18. Function: PROCESSES LOST/DAMAGED SHIPMENT, OVERAGE OR REJECT in accordance with the contract.

ESTIMATED NUMBER OF CONTRACTS AFFECTED:

ESTIMATED MANHOURS PER AFFECTED CONTRACT:

FEEDBACK:

19. Function: TERMINATES CONTRACT FOR CONVENIENCE. Includes (BUT NOT LIMITED TO):

Action Items:

- A. Assembles pertinent documentation and justification for termination for convenience. Contracting Officer reviews contract file for completeness, accuracy, supporting documentation, and justification. Forwards package to legal counsel for review.
- B. Reviews and resolves comments from legal counsel, obtains Contract Review Board approval, notifies contractor of the termination for convenience, issues modification terminating contract, schedules event and meeting date, negotiates settlement, issues a bilateral supplemental agreement, and completes the file (or coordinates settlement with DCAS).
- C. Forwards termination package to the appointed TCO for further processing.

ESTIMATED NUMBER OF CONTRACTS AFFECTED:

ESTIMATED MANHOURS PER AFFECTED CONTRACT:

FEEDBACK:

20. Function: TERMINATES CONTRACT FOR DEFAULT. Includes (BUT NOT LIMITED TO):

Action Items:

- A. Assembles pertinent documentation and justification for termination for default. Contracting Officer reviews contract file for completeness, accuracy, supporting documentation, and justification. Forwards package to legal counsel for review.
- B. Reviews and resolves comments from legal counsel, obtains Contract Review Board Approval, notifies contractor of termination for default, issues modification terminating contract, assembles termination package, and retains copy for contract file.
- C. Monitors performance of new contract, and processes procurement charge if applicable.

ESTIMATED NUMBER OF CONTRACTS AFFECTED:

ESTIMATED MANHOURS PER AFFECTED CONTRACT:

FEEDBACK:

21. Function: BANKRUPTCY/INSOLVENCY PROCEEDINGS. Includes (BUT NOT LIMITED TO):

Action Items:

- A. Receives notification that a petition in federal bankruptcy has been filed or an insolvency proceeding under state law has commenced, and reports matter to counsel. Provides counsel

- with any required information.
- B. Determines whether or not the trustee, receiver, or assignee, as the case may be, elects to continue performance, and the likelihood that the performance under the circumstances will be satisfactory. Provides information to the Contracting Officer.

ESTIMATED NUMBER OF CONTRACTS AFFECTED:

ESTIMATED MANHOURS PER AFFECTED CONTRACT:

FEEDBACK:

22. Function: CLOSES CONTRACT, ensuring action is taken to release the Government and the contractor from primary responsibility. Includes (BUT NOT LIMITED TO):

Action Items

- A. Obtains written release of claim from contractor when required.
- B. Requests final audit for T & M and cost type contracts.
- C. Completes close-out checklist action items.
- D. Completes contract completion statement.
- E. Completes contractor performance evaluation report.
- F. Resolves discrepancy resulting from services/items under warranty.
- G. Obtains copy of payment voucher for contract file.
- H. Prepares modifications to recoup excess funding.
- I. Places closeout date on contract folder, and files in inactive contract file/
- J. Assembles completed contract file.

ESTIMATED NUMBER OF CONTRACTS AFFECTED:

ESTIMATED MANHOURS PER AFFECTED CONTRACT:

FEEDBACK:

23. Function: Assists in REPORT PREPARATION, by gathering the necessary information, and preparing the draft reports (see SUPARS Appendix A for list of recurring reports).

ESTIMATED NUMBER OF CONTRACTS AFFECTED:

ESTIMATED MANHOURS PER AFFECTED CONTRACT:

FEEDBACK:

24. Function: Administer SERVICE CONTRACTS. Includes (BUT NOT LIMITED TO):

Action Items:

- A. Oversight of ordering officers and COTRs.
- B. Maintaining list of COTRs.
- C. Reviewing ordering officer's delivery orders.

ESTIMATED NUMBER OF CONTRACTS AFFECTED:

ESTIMATED MANHOURS PER AFFECTED CONTRACT:

FEEDBACK:

GENERAL QUESTIONS  
CONCERNING CONTRACT ADMINISTRATION

1. How many contracts were processed (established/monitored/closed out) during FY 88?
2. Do the functions that I have listed account for at least 90% of your contract administration workload? If not, what major functions have I not addressed?
3. In your organization, are negotiating/buying functions separate from contract administration functions?
4. A recent study estimated the annual workload for a contract negotiator/buyer located at a non-"cradle to grave" organization to be the following:

1.	80 hours - Holidays	
2.	80	- Training
3.	120	- Annual leave
4.	107	- Sick leave
5.	1700	- Strictly negotiator/buyer functions
6.	0	- Strictly contract administration functions
	----	
TOTAL	2087	- Available hours in a standard work year

Modify these estimates to include the contract administration workload at your command. If you are a "cradle to grave" organization, account for the contract administration workload of a negotiator/buyer by modifying at least line items 5 and 6. If you are not a "cradle to grave" organization reflect the annual workload of a contract administrator by putting 0 for line item 5 and adjusting the other line items.

5. LABOR HOURS / COSTS :

A. Give an estimate of the labor hours and costs in FY 88 for Cost Account 271C for the following categories:

	LABOR HOURS	COSTS
1. CA 271C, Supervisory:		
2. CA 271C, Contract Admin.:		
3. CA 271C, Clerical:		
4. CA 271C, TOTAL:		

APPENDIX D

KEY QUESTIONNAIRE POINTS OF CONTACT

1. NAVY REGIONAL CONTRACTING CENTER, PHILADELPHIA  
LCDR P. M. Evans, SC, USN  
Bernard McDevitt (Code 2)  
Pat Infante (Code 034)
2. NAVY REGIONAL CONTRACTING CENTER, SAN DIEGO  
LT M. A. Rellins (Code S2)
3. NAVY REGIONAL CONTRACTING CENTER, WASHINGTON DC  
Kevin McGinn (Code P)  
LT L. I. Oliver, SC, USN (Code P9)
4. NAVAL SUPPLY CENTER, BREMERTON  
CDR P.J. Flanagan, SC, USN (Code 200)  
David Briggs (Code 204.1)  
Mimi Miller (Code 201.C7)
5. NAVAL SUPPLY CENTER, CHARLESTON  
CDR G.J. Braniff, SC, USN (Code 200)  
William Paggi (Code 203)
6. NAVAL SUPPLY CENTER, JACKSONVILLE  
CDR G.H. Jenkins, SC, USN (Code 200)  
Dan Smith (Code 203)
7. NAVAL SUPPLY CENTER, NORFOLK  
CDR G. B. Foley, SC, USN (Code 200)  
Napoleon Gibson (Code 205)
8. NAVAL SUPPLY CENTER, OAKLAND  
CDR T. J. Gonick, SC, USN (Code 200)  
LCDR R. J. Stearns, SC, USN (Code 201)  
LT G. McKnight, SC, USN (Code 201A)



9. NAVAL SUPPLY CENTER, PEARL HARBOR  
CDR T. J. Stanger, SC, USN (Code 200)  
Robert Kay (Code 205)
10. NAVAL SUPPLY CENTER, PENSACOLA  
CDR R. A. Walsh, SC, USN (Code 200)

# APPENDIX E

## LARGE PURCHASE PRODUCTIVE UNIT MATRIX

CONTRACT TYPE	STANDARD MAN-HOURS	PRODUCTIVE UNIT WEIGHTS
Delivery Orders/GSA/ Other Agencies	13	1
Sealed Bids	39	3
Unpriced BOA Orders	13	1
Initial Placement of BOA's/ Contracts & IOTC's Less Than \$25K	26	2
DEFINITIZED BOA ORDERS		
\$25K to Less Than \$100K	39	3
\$100K to Less Than \$500K	143	11
\$500K to Less Than \$1M	143	11
\$1M to Less Than \$10M	182	14
\$10M and Greater	182	14
NEGOTIATED COMPETITIVE SUPPLY		
\$25K to Less Than \$100K	39	3
\$100K to Less Than \$500K	52	4
\$500K to Less Than \$1M	117	9
\$1M to Less Than \$10M	182	14
\$10M and Greater	182	14
NEGOTIATED COMPETITIVE SERVICE CA RETAINED		
\$25K to Less Than \$100K	52	4
\$100K to Less Than \$500K	156	12
\$500K to Less Than \$1M	156	12
\$1M to Less Than \$10M	195	15
\$10M and Greater	195	15
NEGOTIATED SOLE SOURCE/8A/ NONPROFIT/EDUCATION/UTILITIES		
\$25K to Less Than \$100K	52	4
\$100K to Less Than \$500K	156	12
\$500K to Less Than \$1M	156	12
\$1M to Less Than \$10M	195	15
\$10M and Greater	195	15

## APPENDIX F

### CONTRACT ADMINISTRATION FUNCTIONAL DATA

A consolidation of the numerical data collected from each of the nine Navy Field Contracting Activities that responded to the questionnaire is shown in this appendix. The accumulated data addresses 33 contract administration functions.

# LARGE PURCHASE ADMINISTRATION

	NSC1	NSC2	NSC3	NSC4	NSC5
■ OF CONTRACTS PROCESSED (ESTIMATE)	2,700	660	2,675	1,500	620
■ OF LABOR HOURS (ESTIMATE)	8,119	8,862	26,046	8,062	13,973
1. CONTRACT REVIEW AND ANALYSIS:					
■ CONTRACTS AFFECTED	700	400	655	430	216
■ OF CONTRACTS PROCESSED	0.26	0.61	0.24	0.29	0.35
■ LABOR HRS/CONTRACT	1.0	1.0	2.0	1.0	1.0
TOTAL LABOR HRS/FUNCTION	700	400	1,310	430	2,376
■ TOTAL LABOR HRS (ESTIMATE)	0.09	0.05	0.05	0.05	0.17
2. PREPARES FOR POST-AWARD CONF:					
■ CONTRACTS AFFECTED	5	15	450	80	30
■ OF CONTRACTS PROCESSED	0.00	0.02	0.17	0.05	0.05
■ LABOR HRS/CONTRACT	1.5	1.5	3.0	12.0	4.8
TOTAL LABOR HRS/FUNCTION	8	23	1,350	960	144
■ TOTAL LABOR HRS (ESTIMATE)	0.00	0.00	0.05	0.12	0.01
3. CONDUCTS/ATTENDS POST-AWARD CONF:					
■ CONTRACTS AFFECTED	5	15	450	16	38
■ OF CONTRACTS PROCESSED	0.00	0.02	0.17	0.01	0.06
■ LABOR HRS/CONTRACT	1.5	4.0	3.0	40.0	4.8
TOTAL LABOR HRS/FUNCTION	8	60	1,350	640	182
■ TOTAL LABOR HRS (ESTIMATE)	0.00	0.01	0.05	0.08	0.01
4. PREPARES POST-AWARD LETTER:					
■ CONTRACTS AFFECTED	1	15	200	0	2
■ OF CONTRACTS PROCESSED	0.00	0.02	0.07	0.00	0.00
■ LABOR HRS/CONTRACT	2.0	0.5	0.5	0	1.9
TOTAL LABOR HRS/FUNCTION	2	8	100	4	4
■ TOTAL LABOR HRS (ESTIMATE)	0.00	0.00	0.00	0.00	0.00
5. REVIEW CONTRACT PROGRESS:					
■ CONTRACTS AFFECTED	300	60	850	1,500	174
■ OF CONTRACTS PROCESSED	0.11	0.09	0.32	1.00	0.28
■ LABOR HRS/CONTRACT	3.0	3.0	1.5	0.5	6.2
TOTAL LABOR HRS/FUNCTION	900	180	1,275	750	1,079
■ TOTAL LABOR HRS (ESTIMATE)	0.11	0.02	0.05	0.09	0.08

LARGE PURCHASE ADMINISTRATION

	NSC6	NRCC1	NRCC2	NRCC3	NSC AVG
# OF CONTRACTS PROCESSED (ESTIMATE)	130	13,000	1,273	3,300	1,381
# OF LABOR HOURS (ESTIMATE)	889	32,685	32,624	29,249	10,992
1. CONTRACT REVIEW AND ANALYSIS:					
# CONTRACTS AFFECTED	97	1,300	390	1,300	416
% OF CONTRACTS PROCESSED	0.75	0.10	0.31	0.39	0.30
# LABOR HRS/CONTRACT	2.0	0.5	1.0	2.0	2.2
TOTAL LABOR HRS/FUNCTION	194	650	390	2,600	902
% TOTAL LABOR HRS (ESTIMATE)	0.22	0.02	0.01	0.09	0.08
2. PREPARES FOR POST-AWARD CONF:					
# CONTRACTS AFFECTED	1	130	5	165	97
% OF CONTRACTS PROCESSED	0.01	0.01	0.00	0.05	0.07
# LABOR HRS/CONTRACT	8.0	10.0	2.0	5.0	4.3
TOTAL LABOR HRS/FUNCTION	8	1,300	10	825	415
% TOTAL LABOR HRS (ESTIMATE)	0.01	0.04	0.00	0.03	0.04
3. CONDUCTS/ATTENDS POST-AWARD CONF:					
# CONTRACTS AFFECTED	1	130	5	165	88
% OF CONTRACTS PROCESSED	0.01	0.01	0.00	0.05	0.06
# LABOR HRS/CONTRACT	10.0	8.0	1.5	6.0	4.3
TOTAL LABOR HRS/FUNCTION	10	1,040	8	990	375
% TOTAL LABOR HRS (ESTIMATE)	0.01	0.03	0.00	0.03	0.03
4. PREPARES POST-AWARD LETTER:					
# CONTRACTS AFFECTED	0	520	0	330	36
% OF CONTRACTS PROCESSED	0.00	0.04	0.00	0.10	0.03
# LABOR HRS/CONTRACT	1.0	1.0	0	1.0	0.5
TOTAL LABOR HRS/FUNCTION	0	520	0	330	19
% TOTAL LABOR HRS (ESTIMATE)	0.00	0.02	0.00	0.01	0.00
5. REVIEW CONTRACT PROGRESS:					
# CONTRACTS AFFECTED	55	4,420	1,130	0	490
% OF CONTRACTS PROCESSED	0.42	0.34	0.89	0.00	0.35
# LABOR HRS/CONTRACT	1.0	1.0	2.0	0	1.4
TOTAL LABOR HRS/FUNCTION	55	4,420	2,260	0	706
% TOTAL LABOR HRS (ESTIMATE)	0.06	0.14	0.07	0.00	0.06

LABOR PURCHASE ADMINISTRATION

	NSL DEV %	NSL HRS	NSL DEV %	TOTAL HRS	TOTAL DEV %
# OF CONTRACTS PROCESSED (ESTIMATE)	0.73	5,858	0.87	2,873	1.30
# OF LABOR HOURS (ESTIMATE)	0.70	31,519	0.05	17,834	0.65
1. CONTRACT REVIEW AND ANALYSIS:					
# CONTRACTS AFFECTED		997		610	
% OF CONTRACTS PROCESSED	0.46	0.17	0.46	0.21	0.51
# LABOR HRS/CONTRACT	1.20	1.2	0.53	1.6	1.29
TOTAL LABOR HRS/FUNCTION		1,213		1,006	
% TOTAL LABOR HRS (ESTIMATE)	0.64	0.04	0.86	0.06	0.79
2. PREPARES FOR POST-AWARD CONF:					
# CONTRACTS AFFECTED		100		98	
% OF CONTRACTS PROCESSED	1.11	0.02	0.96	0.03	1.21
# LABOR HRS/CONTRACT	0.74	7.1	0.58	5.3	0.69
TOTAL LABOR HRS/FUNCTION		712		514	
% TOTAL LABOR HRS (ESTIMATE)	1.31	0.02	0.73	0.03	1.24
3. CONDUCTS/ATTENDS PST-AWARD CONF:					
# CONTRACTS AFFECTED		100		92	
% OF CONTRACTS PROCESSED	1.28	0.02	0.96	0.03	1.35
# LABOR HRS/CONTRACT	1.27	6.8	0.53	5.2	1.30
TOTAL LABOR HRS/FUNCTION		679		476	
% TOTAL LABOR HRS (ESTIMATE)	1.05	0.02	0.70	0.03	0.98
4. PREPARES POST-AWARD LETTER:					
# CONTRACTS AFFECTED		283		119	
% OF CONTRACTS PROCESSED	1.61	0.05	0.88	0.04	1.32
# LABOR HRS/CONTRACT	0.59	1.0	0.00	0.9	0.52
TOTAL LABOR HRS/FUNCTION		283		107	
% TOTAL LABOR HRS (ESTIMATE)	1.57	0.01	0.74	0.01	1.55
5. REVIEW CONTRACT PROGRESS:					
# CONTRACTS AFFECTED		1,850		943	
% OF CONTRACTS PROCESSED	0.82	0.32	0.89	0.33	0.85
# LABOR HRS/CONTRACT	0.75	1.2	0.33	1.3	0.75
TOTAL LABOR HRS/FUNCTION		2,227		1,213	
% TOTAL LABOR HRS (ESTIMATE)	0.43	0.07	0.81	0.05	0.58

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LARGE PURCHASE ADMINISTRATION

	NSC1	NSC2	NSC3	NSC4	NSC5
# OF CONTRACTS PROCESSED (ESTIMATE)	2,700	660	2,675	1,500	620
# OF LABOR HOURS (ESTIMATE)	8,119	8,862	26,046	8,062	13,973
6. ISSUES STOP WORK ORDER:					
# CONTRACTS AFFECTED	5	0	75	24	0
% OF CONTRACTS PROCESSED	0.00	0.00	0.03	0.02	0.00
# LABOR HRS/CONTRACT	8.0		1.5	8.0	
TOTAL LABOR HRS/FUNCTION	40	0	113	192	0
% TOTAL LABOR HRS (ESTIMATE)	0.00	0.00	0.00	0.02	0.00
7. ASSESS LIQUIDATED DAMAGES:					
# CONTRACTS AFFECTED	2	0	0	0	4
% OF CONTRACTS PROCESSED	0.00	0.00	0.00	0.00	0.01
# LABOR HRS/CONTRACT	20.0				7.5
TOTAL LABOR HRS/FUNCTION	40	0	0	0	30
% TOTAL LABOR HRS (ESTIMATE)	0.00	0.00	0.00	0.00	0.00
8. MONITOR CONTRACTOR PERFORMANCE					
# CONTRACTS AFFECTED	700	75	600	43	153
% OF CONTRACTS PROCESSED	0.26	0.11	0.22	0.03	0.25
# LABOR HRS/CONTRACT	3.0	5.0	2.0	5.0	10.7
TOTAL LABOR HRS/FUNCTION	2,100	375	1,200	215	1,637
% TOTAL LABOR HRS (ESTIMATE)	0.26	0.04	0.05	0.03	0.12
9. VISITS CONTRACTOR'S FACILITY					
# CONTRACTS AFFECTED	5	0	50	0	2
% OF CONTRACTS PROCESSED	0.00	0.00	0.02	0.00	0.00
# LABOR HRS/CONTRACT	20.0		4.0		1.9
TOTAL LABOR HRS/FUNCTION	100	0	200	0	4
% TOTAL LABOR HRS (ESTIMATE)	0.01	0.00	0.01	0.00	0.00
10. ISSUES CURE NOTICE					
# CONTRACTS AFFECTED	25	18	80	0	11
% OF CONTRACTS PROCESSED	0.01	0.01	0.03	0.00	0.02
# LABOR HRS/CONTRACT	3.0	2.0	2.0	0	17.0
TOTAL LABOR HRS/FUNCTION	75	36	160	0	187
% TOTAL LABOR HRS (ESTIMATE)	0.01	0.00	0.01	0.00	0.01

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LARGE PURCHASE ADMINISTRATION  
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	NSCS	NRCC1	NRCC2	NRCC3	HSC AVG
# OF CONTRACTS PROCESSED (ESTIMATE)	130	13,000	1,273	3,300	1,361
# OF LABOR HOURS (ESTIMATE)	889	32,685	32,624	29,249	10,992
6. ISSUES STOP WORK ORDER:					
# CONTRACTS AFFECTED	0	110	2	5	17
% OF CONTRACTS PROCESSED	0.00	0.01	0.00	0.00	0.01
# LABOR HRS/CONTRACT		6.0	3.0	4.0	3.3
TOTAL LABOR HRS/FUNCTION	0	660	6	20	57
% TOTAL LABOR HRS (ESTIMATE)	0.00	0.02	0.00	0.00	0.01
7. ASSESS LIQUIDATED DAMAGES:					
# CONTRACTS AFFECTED	0	0	3	0	1
% OF CONTRACTS PROCESSED	0.00	0.00	0.00	0.00	0.00
# LABOR HRS/CONTRACT		0	4.0	0	11.7
TOTAL LABOR HRS/FUNCTION	0	0	12	0	12
% TOTAL LABOR HRS (ESTIMATE)	0.00	0.00	0.00	0.00	0.00
8. MONITOR CONTRACTOR PERFORMANCE					
# CONTRACTS AFFECTED	10	5,525	800	1,000	264
% OF CONTRACTS PROCESSED	0.08	0.42	0.63	0.30	0.19
# LABOR HRS/CONTRACT	3.0	1.0	18.0	4.0	3.5
TOTAL LABOR HRS/FUNCTION	30	5,525	14,400	4,000	926
% TOTAL LABOR HRS (ESTIMATE)	0.03	0.17	0.44	0.14	0.08
9. VISITS CONTRACTOR'S FACILITY					
# CONTRACTS AFFECTED	0	0	0	6	10
% OF CONTRACTS PROCESSED	0.00	0.00	0.00	0.00	0.01
# LABOR HRS/CONTRACT		0	0	8.0	5.3
TOTAL LABOR HRS/FUNCTION	0	0	0	48	51
% TOTAL LABOR HRS (ESTIMATE)	0.00	0.00	0.00	0.00	0.00
10. ISSUES CURE NOTICE					
# CONTRACTS AFFECTED	0	275	20	48	22
% OF CONTRACTS PROCESSED	0.00	0.02	0.02	0.01	0.02
# LABOR HRS/CONTRACT		4.0	4.0	16.0	3.4
TOTAL LABOR HRS/FUNCTION	0	1,100	80	768	76
% TOTAL LABOR HRS (ESTIMATE)	0.00	0.03	0.00	0.03	0.01



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LARGE PURCHASE ADMINISTRATION  
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	NSC DEV %	NPCC AVG	NPCC DEV %	TOTAL AVG	TOTAL DEV %
# OF CONTRACTS PROCESSED (ESTIMATE)	0.73	5,858	0.87	2,873	1.30
# OF LABOR HOURS (ESTIMATE)	0.70	31,519	0.05	17,834	0.65
6. ISSUES STOP WORK ORDER:					
# CONTRACTS AFFECTED		39		25	
% OF CONTRACTS PROCESSED	0.86	0.01	0.49	0.01	1.07
# LABOR HRS/CONTRACT	0.93	5.9	0.21	4.7	0.53
TOTAL LABOR HRS/FUNCTION		229		115	
% TOTAL LABOR HRS (ESTIMATE)	1.62	0.01	1.28	0.01	1.37
7. ASSESS LIQUIDATED DAMAGES:					
# CONTRACTS AFFECTED		1		1	
% OF CONTRACTS PROCESSED	3.27	0.00	6.51	0.00	5.87
# LABOR HRS/CONTRACT	0.54	4.0	0.00	9.1	0.75
TOTAL LABOR HRS/FUNCTION		4		9	
% TOTAL LABOR HRS (ESTIMATE)	1.74	0.00	1.37	0.00	3.12
8. MONITOR CONTRACTOR PERFORMANCE					
# CONTRACTS AFFECTED		2,442		990	
% OF CONTRACTS PROCESSED	0.47	0.42	0.32	0.34	0.51
# LABOR HRS/CONTRACT	0.81	3.3	2.27	3.3	1.53
TOTAL LABOR HRS/FUNCTION		7,975		3,276	
% TOTAL LABOR HRS (ESTIMATE)	0.98	0.25	0.54	0.18	0.70
9. VISITS CONTRACTOR'S FACILITY					
# CONTRACTS AFFECTED		2		7	
% OF CONTRACTS PROCESSED	0.97	0.00	2.51	0.00	2.34
# LABOR HRS/CONTRACT	1.52	8.0	0.00	5.6	1.25
TOTAL LABOR HRS/FUNCTION		16		39	
% TOTAL LABOR HRS (ESTIMATE)	1.06	0.00	1.52	0.00	1.92
10. ISSUES CURE NOTICE					
# CONTRACTS AFFECTED		114		53	
% OF CONTRACTS PROCESSED	0.74	0.02	0.15	0.02	0.54
# LABOR HRS/CONTRACT	1.86	5.7	1.00	5.0	1.22
TOTAL LABOR HRS/FUNCTION		649		267	
% TOTAL LABOR HRS (ESTIMATE)	0.69	0.02	0.65	0.01	0.75

# LARGE PURCHASE ADMINISTRATION

	NSC1	NSC2	NSC3	NSC4	NSC5
# OF CONTRACTS PROCESSED (ESTIMATE)	2,700	660	2,675	1,500	620
# OF LABOR HOURS (ESTIMATE)	8,119	8,962	26,046	8,062	13,973
11. ISSUES SHOW CAUSE NOTICE:					
# CONTRACTS AFFECTED	35	14	125	8	11
% OF CONTRACTS PROCESSED	0.01	0.02	0.05	0.01	0.02
# LABOR HRS/CONTRACT	3.0	2.0	2.0	4.0	16.5
TOTAL LABOR HRS/FUNCTION	105	28	250	32	182
% TOTAL LABOR HRS (ESTIMATE)	0.01	0.00	0.01	0.00	0.01
12. PROCESSES PAYMENT REQUESTS:					
# CONTRACTS AFFECTED	300	50	400	225	5
% OF CONTRACTS PROCESSED	0.11	0.08	0.15	0.15	0.01
# LABOR HRS/CONTRACT	2.0	1.0	1.0	2.0	2.4
TOTAL LABOR HRS/FUNCTION	600	50	400	450	11
% TOTAL LABOR HRS (ESTIMATE)	0.07	0.01	0.02	0.06	0.00
13A. PRICE MODIFICATION:					
# CONTRACTS AFFECTED	65	50	150	75	55
% OF CONTRACTS PROCESSED	0.02	0.08	0.06	0.05	0.09
# LABOR HRS/CONTRACT	2.0	1.5	2.0	1.0	17.5
TOTAL LABOR HRS/FUNCTION	130	75	300	75	963
% TOTAL LABOR HRS (ESTIMATE)	0.02	0.01	0.01	0.01	0.07
13B. DESCRIPTION/MATERIAL MOD:					
# CONTRACTS AFFECTED	208	20	50	270	21
% OF CONTRACTS PROCESSED	0.08	0.03	0.02	0.18	0.03
# LABOR HRS/CONTRACT	1.0	1.0	1.0	1.0	10.0
TOTAL LABOR HRS/FUNCTION	208	20	50	0	210
% TOTAL LABOR HRS (ESTIMATE)	0.03	0.00	0.00	0.00	0.02
13C. INSPECTION/ACCEPTANCE MOD:					
# CONTRACTS AFFECTED	28	10	100	270	2
% OF CONTRACTS PROCESSED	0.01	0.02	0.04	0.18	0.00
# LABOR HRS/CONTRACT	1.0	0.3	1.0	0.5	7.5
TOTAL LABOR HRS/FUNCTION	28	3	100	135	15
% TOTAL LABOR HRS (ESTIMATE)	0.00	0.00	0.00	0.02	0.00

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LARGE PURCHASE ADMINISTRATION

	NSC6	NRCC1	NRCC2	NRCC3	NSC RVC
# OF CONTRACTS PROCESSED (ESTIMATE)	130	13,000	1,273	3,300	1,381
# OF LABOR HOURS (ESTIMATE)	889	32,685	32,624	29,249	10,992
11. ISSUES SHOW CAUSE NOTICE:					
# CONTRACTS AFFECTED	0	275	15	10	32
% OF CONTRACTS PROCESSED	0.00	0.02	0.01	0.00	0.02
# LABOR HRS/CONTRACT		4.0	4.0	16.0	3.1
TOTAL LABOR HRS/FUNCTION	0	1,100	60	160	99
% TOTAL LABOR HRS (ESTIMATE)	0.00	0.03	0.00	0.01	0.01
12. PROCESSES PAYMENT REQUESTS:					
# CONTRACTS AFFECTED	20	0	40	980	167
% OF CONTRACTS PROCESSED	0.15	0.00	0.03	0.30	0.12
# LABOR HRS/CONTRACT	1.0		20.0	5.0	1.5
TOTAL LABOR HRS/FUNCTION	20	0	800	4,900	255
% TOTAL LABOR HRS (ESTIMATE)	0.02	0.00	0.02	0.17	0.02
13A. PRICE MODIFICATION:					
# CONTRACTS AFFECTED	40	150	450	26	73
% OF CONTRACTS PROCESSED	0.31	0.01	0.35	0.01	0.05
# LABOR HRS/CONTRACT	1.5	10.0	10.0	20.0	3.7
TOTAL LABOR HRS/FUNCTION	60	1,500	4,500	520	267
% TOTAL LABOR HRS (ESTIMATE)	0.07	0.05	0.14	0.02	0.02
13B. DESCRIPTION/MATERIAL MOD:					
# CONTRACTS AFFECTED	20	225	125	26	98
% OF CONTRACTS PROCESSED	0.15	0.02	0.10	0.01	0.07
# LABOR HRS/CONTRACT	1.5	10.0	8.0	20.0	0.9
TOTAL LABOR HRS/FUNCTION	30	2,250	1,000	520	86
% TOTAL LABOR HRS (ESTIMATE)	0.03	0.07	0.03	0.02	0.01
13C. INSPECTION/ACCEPTANCE MOD:					
# CONTRACTS AFFECTED	40	75	5		75
% OF CONTRACTS PROCESSED	0.31	0.01	0.00	0.00	0.05
# LABOR HRS/CONTRACT	1.5	3.0	2.0		0.8
TOTAL LABOR HRS/FUNCTION	60	225	10	0	57
% TOTAL LABOR HRS (ESTIMATE)	0.07	0.01	0.00	0.00	0.01

# LARGE PURCHASE ADMINISTRATION

	NSC DEV %	NRCC AUG	NRCC DEV %	TOTAL HRS	TOTAL DEV %
# OF CONTRACTS PROCESSED (ESTIMATE)	0.73	5,858	0.87	2,873	1.30
# OF LABOR HOURS (ESTIMATE)	0.70	31,519	0.05	17,834	0.65
11. ISSUES SHOW CAUSE NOTICE:					
# CONTRACTS AFFECTED		100		55	
% OF CONTRACTS PROCESSED	0.64	0.02	0.43	0.02	0.69
# LABOR HRS/CONTRACT	1.80	4.4	1.29	3.9	1.47
TOTAL LABOR HRS/FUNCTION		440		213	
% TOTAL LABOR HRS (ESTIMATE)	0.55	0.01	1.02	0.01	0.81
12. PROCESSES PAYMENT REQUESTS:					
# CONTRACTS AFFECTED		340		224	
% OF CONTRACTS PROCESSED	0.44	0.06	2.29	0.08	1.13
# LABOR HRS/CONTRACT	0.38	5.6	1.34	3.6	1.69
TOTAL LABOR HRS/FUNCTION		1,900		803	
% TOTAL LABOR HRS (ESTIMATE)	1.15	0.06	1.23	0.05	1.13
13A. PRICE MODIFICATION:					
# CONTRACTS AFFECTED		209		118	
% OF CONTRACTS PROCESSED	1.81	0.04	4.55	0.04	2.97
# LABOR HRS/CONTRACT	1.61	10.4	0.45	7.7	0.92
TOTAL LABOR HRS/FUNCTION		2,173		903	
% TOTAL LABOR HRS (ESTIMATE)	1.11	0.07	0.74	0.05	0.81
13B. DESCRIPTION/MATERIAL MOD:					
# CONTRACTS AFFECTED		125		107	
% OF CONTRACTS PROCESSED	0.89	0.02	1.89	0.04	1.60
# LABOR HRS/CONTRACT	3.78	10.0	0.52	4.4	1.41
TOTAL LABOR HRS/FUNCTION		1,257		476	
% TOTAL LABOR HRS (ESTIMATE)	1.64	0.04	0.54	0.03	0.77
13C. INSPECTION/ACCEPTANCE MOD:					
# CONTRACTS AFFECTED		40		66	
% OF CONTRACTS PROCESSED	2.10	0.01	0.35	0.02	4.42
# LABOR HRS/CONTRACT	3.30	2.9	0.17	1.1	2.02
TOTAL LABOR HRS/FUNCTION		118		72	
% TOTAL LABOR HRS (ESTIMATE)	4.62	0.00	0.85	0.00	5.53

LARGE PURCHASE ADMINISTRATION

	NSC1	NSC2	NSC3	NSC4	NSC5
# OF CONTRACTS PROCESSED (ESTIMATE)	2,700	660	2,675	1,500	620
# OF LABOR HOURS (ESTIMATE)	8,119	8,862	26,046	8,062	13,973
130. LINE ITEM MD0:					
# CONTRACTS AFFECTED	36	75	100	270	32
% OF CONTRACTS PROCESSED	0.01	0.11	0.04	0.18	0.05
# LABOR HRS/CONTRACT	2.0	2.0	1.0	1.0	4.2
TOTAL LABOR HRS/FUNCTION	76	150	100	270	134
% TOTAL LABOR HRS (ESTIMATE)	0.01	0.02	0.00	0.03	0.01
13E. DELIVERY/PERIOD OF PERF. MD0:					
# CONTRACTS AFFECTED	400	40	300	270	56
% OF CONTRACTS PROCESSED	0.15	0.06	0.11	0.18	0.09
# LABOR HRS/CONTRACT	2.0	1.0	2.0	1.0	6.1
TOTAL LABOR HRS/FUNCTION	800	40	600	270	342
% TOTAL LABOR HRS (ESTIMATE)	0.10	0.00	0.02	0.03	0.02
13F. QA REQUIREMENT MD0:					
# CONTRACTS AFFECTED	62	5	50	270	0
% OF CONTRACTS PROCESSED	0.02	0.01	0.02	0.18	0.00
# LABOR HRS/CONTRACT	1.5	0.5	1.5	0.5	0
TOTAL LABOR HRS/FUNCTION	93	3	75	135	0
% TOTAL LABOR HRS (ESTIMATE)	0.01	0.00	0.00	0.02	0.00
13G. CHANGE COTR MD0:					
# CONTRACTS AFFECTED	23	5	300	150	27
% OF CONTRACTS PROCESSED	0.01	0.01	0.11	0.10	0.04
# LABOR HRS/CONTRACT	1.0	0.5	1.0	1.0	2.9
TOTAL LABOR HRS/FUNCTION	23	3	300	150	78
% TOTAL LABOR HRS (ESTIMATE)	0.00	0.00	0.01	0.02	0.01
13H. QUANTITY MD0:					
# CONTRACTS AFFECTED	16	20	100	150	21
% OF CONTRACTS PROCESSED	0.01	0.03	0.04	0.10	0.03
# LABOR HRS/CONTRACT	1.5	1.0	1.0	1.0	31.3
TOTAL LABOR HRS/FUNCTION	24	20	100	150	657
% TOTAL LABOR HRS (ESTIMATE)	0.00	0.00	0.00	0.02	0.05

LARGE PURCHASE ADMINISTRATION

	NSC6	NRUC1	NRCL2	NRCC3	NSC AVG
# OF CONTRACTS PROCESSED (ESTIMATE)	130	13,000	1,273	3,300	1,381
# OF LABOR HOURS (ESTIMATE)	889	32,685	32,624	29,249	10,992
130. LINE ITEM MOD:					
# CONTRACTS AFFECTED	20	25	10	26	89
% OF CONTRACTS PROCESSED	0.15	0.00	0.01	0.01	0.06
# LABOR HRS/CONTRACT	1.0	3.0	12.0	5.0	1.4
TOTAL LABOR HRS/FUNCTION	20	75	120	130	125
% TOTAL LABOR HRS (ESTIMATE)	0.02	0.00	0.00	0.00	0.01
13E. DELIVERY/PER100 OF PERF. MOD:					
# CONTRACTS AFFECTED	40	300	78	0	184
% OF CONTRACTS PROCESSED	0.31	0.02	0.06	0.00	0.13
# LABOR HRS/CONTRACT	2.0	5.0	8.0	0	1.9
TOTAL LABOR HRS/FUNCTION	80	1,500	624	0	355
% TOTAL LABOR HRS (ESTIMATE)	0.09	0.05	0.02	0.00	0.03
13F. QA REQUIREMENT MOD:					
# CONTRACTS AFFECTED	5	25	2	0	65
% OF CONTRACTS PROCESSED	0.04	0.00	0.00	0.00	0.05
# LABOR HRS/CONTRACT	1.0	3.0	2.0	0	0.8
TOTAL LABOR HRS/FUNCTION	5	75	4	0	52
% TOTAL LABOR HRS (ESTIMATE)	0.01	0.00	0.00	0.00	0.00
13G. CHANGE COTR MOD:					
# CONTRACTS AFFECTED	2	0	0	0	65
% OF CONTRACTS PROCESSED	0.02	0.00	0.00	0.00	0.06
# LABOR HRS/CONTRACT	1.0	0	0	0	1.1
TOTAL LABOR HRS/FUNCTION	2	0	0	0	93
% TOTAL LABOR HRS (ESTIMATE)	0.00	0.00	0.00	0.00	0.01
13H. QUANTITY MOD:					
# CONTRACTS AFFECTED	5	75	100	20	52
% OF CONTRACTS PROCESSED	0.04	0.01	0.08	0.01	0.04
# LABOR HRS/CONTRACT	1.0	3.0	6.0	5.0	3.1
TOTAL LABOR HRS/FUNCTION	5	225	600	100	159
% TOTAL LABOR HRS (ESTIMATE)	0.01	0.01	0.02	0.00	0.01

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LARGE PURCHASE ADMINISTRATION  
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	NSC DEV %	NRCC AVG	NRCC DEV %	TOTAL AVG	TOTAL DEV %
# OF CONTRACTS PROCESSED (ESTIMATE)	0.73	5,858	0.87	2,873	1.30
# OF LABOR HOURS (ESTIMATE)	0.70	31,519	0.05	17,834	0.65
130. LINE ITEM MOO:					
# CONTRACTS AFFECTED		20		66	
% OF CONTRACTS PROCESSED	0.95	0.00	0.81	0.02	2.80
# LABOR HRS/CONTRACT	0.81	5.3	0.72	1.8	1.83
TOTAL LABOR HRS/FUNCTION		108		119	
% TOTAL LABOR HRS (ESTIMATE)	0.87	0.00	0.26	0.01	1.49
13E. DELIVERY/PER100 OF PERF. MOO:					
# CONTRACTS AFFECTED		126		165	
% OF CONTRACTS PROCESSED	0.60	0.02	1.17	0.06	1.54
# LABOR HRS/CONTRACT	0.90	5.6	0.27	2.9	0.86
TOTAL LABOR HRS/FUNCTION		708		473	
% TOTAL LABOR HRS (ESTIMATE)	1.10	0.02	0.84	0.03	1.24
13F. QA REQUIREMENT MOO:					
# CONTRACTS AFFECTED		9		47	
% OF CONTRACTS PROCESSED	1.30	0.00	0.54	0.02	3.36
# LABOR HRS/CONTRACT	0.56	2.9	0.17	0.9	0.88
TOTAL LABOR HRS/FUNCTION		26		43	
% TOTAL LABOR HRS (ESTIMATE)	1.30	0.00	1.26	0.00	2.32
13G. CHANGE CTR MOO:					
# CONTRACTS AFFECTED		0		56	
% OF CONTRACTS PROCESSED	0.70	0.00	0.00	0.02	2.13
# LABOR HRS/CONTRACT	0.70	0.0	0.00	1.1	0.70
TOTAL LABOR HRS/FUNCTION		0		62	
% TOTAL LABOR HRS (ESTIMATE)	0.75	0.00	0.00	0.00	1.76
13H. QUANTITY MOO:					
# CONTRACTS AFFECTED		65		56	
% OF CONTRACTS PROCESSED	0.76	0.01	3.09	0.02	1.58
# LABOR HRS/CONTRACT	3.67	4.7	0.26	3.7	2.49
TOTAL LABOR HRS/FUNCTION		308		209	
% TOTAL LABOR HRS (ESTIMATE)	1.11	0.01	0.65	0.01	1.17

# LARGE PURCHASE ADMINISTRATION

	NSC1	NSC2	NSC3	NSC4	NSC5
# OF CONTRACTS PROCESSED (ESTIMATE)	2,700	660	2,675	1,500	620
# OF LABOR HOURS (ESTIMATE)	8,119	8,862	26,046	8,062	13,973
13I. DELIVERY DESTINATION MOO:					
# CONTRACTS AFFECTED	9	10	50	150	4
% OF CONTRACTS PROCESSED	0.00	0.02	0.02	0.10	0.01
# LABOR HRS/CONTRACT	2.5	0.5	0.5	1.0	7.4
TOTAL LABOR HRS/FUNCTION	23	5	25	150	30
% TOTAL LABOR HRS (ESTIMATE)	0.00	0.00	0.00	0.02	0.00
13J. "ALL OTHER" MOO:					
# CONTRACTS AFFECTED	360	30	100	75	59
% OF CONTRACTS PROCESSED	0.13	0.05	0.04	0.05	0.10
# LABOR HRS/CONTRACT	1.0	1.0	1.0	1.0	1.9
TOTAL LABOR HRS/FUNCTION	360	30	100	75	112
% TOTAL LABOR HRS (ESTIMATE)	0.04	0.00	0.00	0.01	0.01
14. ADMINISTRATIVE CHANGE MOO:					
# CONTRACTS AFFECTED	35	40	300	52	183
% OF CONTRACTS PROCESSED	0.01	0.06	0.11	0.03	0.30
# LABOR HRS/CONTRACT	1.0	0.5	1.0	4.0	3.7
TOTAL LABOR HRS/FUNCTION	35	20	300	208	677
% TOTAL LABOR HRS (ESTIMATE)	0.00	0.00	0.01	0.03	0.05
15. CHANGE ORDER MOO:					
# CONTRACTS AFFECTED	14	2	50	12	4
% OF CONTRACTS PROCESSED	0.01	0.00	0.02	0.01	0.01
# LABOR HRS/CONTRACT	5.0	1.0	2.0	3.0	14.7
TOTAL LABOR HRS/FUNCTION	70	2	100	36	59
% TOTAL LABOR HRS (ESTIMATE)	0.01	0.00	0.00	0.00	0.00
16. PROCESS GFN/GFE ISSUE:					
# CONTRACTS AFFECTED	5	1	50	1	5
% OF CONTRACTS PROCESSED	0.00	0.00	0.02	0.00	0.01
# LABOR HRS/CONTRACT	3.0	1.0	2.0	16.0	11.8
TOTAL LABOR HRS/FUNCTION	15	1	100	16	59
% TOTAL LABOR HRS (ESTIMATE)	0.00	0.00	0.00	0.00	0.00



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LARGE PURCHASE ADMINISTRATION

	NSC6	NRCC1	NRCC2	NRCC3	NSC AVG
# OF CONTRACTS PROCESSED (ESTIMATE)	130	13,000	1,273	3,300	1,381
# OF LABOR HOURS (ESTIMATE)	889	32,685	32,624	29,249	10,992
13I. DELIVERY DESTINATION MOO:					
# CONTRACTS AFFECTED	5	75	5	0	38
% OF CONTRACTS PROCESSED	0.04	0.01	0.00	0.00	0.03
# LABOR HRS/CONTRACT	1.5	5.0	3.0	1.1	1.1
TOTAL LABOR HRS/FUNCTION	8	375	15	0	40
% TOTAL LABOR HRS (ESTIMATE)	0.01	0.01	0.00	0.00	0.00
13J. "ALL OTHER" MOO:					
# CONTRACTS AFFECTED	5	100	100	26	105
% OF CONTRACTS PROCESSED	0.04	0.01	0.08	0.01	0.08
# LABOR HRS/CONTRACT	1.0	10.0	5.0	5.0	1.1
TOTAL LABOR HRS/FUNCTION	5	1,000	500	130	114
% TOTAL LABOR HRS (ESTIMATE)	0.01	0.03	0.02	0.00	0.01
14. ADMINISTRATIVE CHANGE MOO:					
# CONTRACTS AFFECTED	30	2,210	700	1,350	107
% OF CONTRACTS PROCESSED	0.23	0.17	0.55	0.41	0.08
# LABOR HRS/CONTRACT	0.5	1.0	2.5	2.0	2.0
TOTAL LABOR HRS/FUNCTION	15	2,210	1,750	2,700	209
% TOTAL LABOR HRS (ESTIMATE)	0.02	0.07	0.05	0.09	0.02
15. CHANGE ORDER MOO:					
# CONTRACTS AFFECTED	0	555	1	15	14
% OF CONTRACTS PROCESSED	0.00	0.04	0.00	0.00	0.01
# LABOR HRS/CONTRACT		2.0	15.0	30.0	3.3
TOTAL LABOR HRS/FUNCTION	0	1,110	15	450	44
% TOTAL LABOR HRS (ESTIMATE)	0.00	0.03	0.00	0.02	0.00
16. PROCESS GF/MGFE ISSUE:					
# CONTRACTS AFFECTED	15	0	50	2	13
% OF CONTRACTS PROCESSED	0.12	0.00	0.04	0.00	0.01
# LABOR HRS/CONTRACT	2.0	0	1.0	2.0	2.9
TOTAL LABOR HRS/FUNCTION	30	0	50	4	37
% TOTAL LABOR HRS (ESTIMATE)	0.03	0.00	0.00	0.00	0.00

# LARGE PURCHASE ADMINISTRATION

# OF CONTRACTS PROCESSED (ESTIMATE)  
# OF LABOR HOURS (ESTIMATE)

NCL DEV %	NRCC HVG	NRCC DEV %	TOTAL HVG	TOTAL DEV %
0.73	5,658	0.87	2,873	1.30
0.70	31,519	0.05	17,834	0.65

## 13I. DELIVERY DESTINATION MOD:

# CONTRACTS AFFECTED  
% OF CONTRACTS PROCESSED  
# LABOR HRS/CONTRACT  
TOTAL LABOR HRS/FUNCTION  
% TOTAL LABOR HRS (ESTIMATE)

	34	
27	0.00	0.53
0.00	4.9	0.21
1.20	130	70
2.29	0.00	0.00
1.76		1.29
		1.55

## 13J. "ALL OTHER" MOD:

# CONTRACTS AFFECTED  
% OF CONTRACTS PROCESSED  
# LABOR HRS/CONTRACT  
TOTAL LABOR HRS/FUNCTION  
% TOTAL LABOR HRS (ESTIMATE)

	75	
0.47	0.01	2.59
0.31	7.2	0.33
1.40	543	257
	0.02	0.62
		0.01
		0.94

## 14. ADMINISTRATIVE CHANGE MOD:

# CONTRACTS AFFECTED  
% OF CONTRACTS PROCESSED  
# LABOR HRS/CONTRACT  
TOTAL LABOR HRS/FUNCTION  
% TOTAL LABOR HRS (ESTIMATE)

	1,420	
1.35	0.24	0.65
0.75	1.6	0.40
0.82	2,220	879
	0.07	0.23
		0.05
		0.60

## 15. CHANGE ORDER MOD:

# CONTRACTS AFFECTED  
% OF CONTRACTS PROCESSED  
# LABOR HRS/CONTRACT  
TOTAL LABOR HRS/FUNCTION  
% TOTAL LABOR HRS (ESTIMATE)

	190	
0.59	0.03	0.58
1.52	2.8	4.15
0.72	525	205
	0.02	0.82
		0.01
		0.90

## 16. PROCESS GFN/GFE ISSUE:

# CONTRACTS AFFECTED  
% OF CONTRACTS PROCESSED  
# LABOR HRS/CONTRACT  
TOTAL LABOR HRS/FUNCTION  
% TOTAL LABOR HRS (ESTIMATE)

	14	
4.43	0.00	6.21
2.01	1.0	0.48
3.51	18	31
	0.00	0.00
		1.21
		12.66

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LARGE PURCHASE ADMINISTRATION

	NSC1	NSC2	NSC3	NSC4	NSC5
# OF CONTRACTS PROCESSED (ESTIMATE)	2,700	660	2,675	1,500	620
# OF LABOR HOURS (ESTIMATE)	8,119	8,862	26,046	8,062	13,973
17. ADMINSTEPS CLAIMS/APPEALS:					
# CONTRACTS AFFECTED	34	25	80	8	4
% OF CONTRACTS PROCESSED	0.01	0.04	0.03	0.01	0.01
# LABOR HRS/CONTRACT	12.0	160.0	40.0	30.0	32.0
TOTAL LABOR HRS/FUNCTION	408	4,000	3,200	240	128
% TOTAL LABOR HRS (ESTIMATE)	0.05	0.45	0.12	0.03	0.01
18. PROCESS SHIPMENT DISCREPANCIES:					
# CONTRACTS AFFECTED	15	3	30	0	0
% OF CONTRACTS PROCESSED	0.01	0.00	0.01	0.00	0.00
# LABOR HRS/CONTRACT	2.0	1.0	4.0		
TOTAL LABOR HRS/FUNCTION	30	3	120	0	0
% TOTAL LABOR HRS (ESTIMATE)	0.00	0.00	0.00	0.00	0.00
19. TERMINATE FOR CONVENIENCE:					
# CONTRACTS AFFECTED	28	2	25	12	9
% OF CONTRACTS PROCESSED	0.01	0.00	0.01	0.01	0.01
# LABOR HRS/CONTRACT	12.0	15.0	24.0	4.0	32.0
TOTAL LABOR HRS/FUNCTION	336	30	600	48	288
% TOTAL LABOR HRS (ESTIMATE)	0.04	0.00	0.02	0.01	0.02
20. TERMINATE FOR CONVENIENCE:					
# CONTRACTS AFFECTED	6	3	15	0	8
% OF CONTRACTS PROCESSED	0.00	0.00	0.01	0.00	0.01
# LABOR HRS/CONTRACT	16.0	15.0	40.0		71.0
TOTAL LABOR HRS/FUNCTION	96	45	600	0	568
% TOTAL LABOR HRS (ESTIMATE)	0.01	0.01	0.02	0.00	0.04
21. PROCESS BANKRUPTCY/INSOLVENCY:					
# CONTRACTS AFFECTED	5	6	5	0	1
% OF CONTRACTS PROCESSED	0.00	0.01	0.00	0.00	0.00
# LABOR HRS/CONTRACT	2.0	2.0	10.0		15.0
TOTAL LABOR HRS/FUNCTION	10	12	50	0	15
% TOTAL LABOR HRS (ESTIMATE)	0.00	0.00	0.00	0.00	0.00

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LARGE PURCHASE ADMINISTRATION  
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	NSC6	NRCC1	NRCC2	NRCC3	NSC HVS
■ OF CONTRACTS PROCESSED (ESTIMATE)	130	13,000	1,273	3,300	1,381
■ OF LABOR HOURS (ESTIMATE)	889	32,685	32,624	29,249	10,992
17. ADMINISTRATORS CLAIMS/APPEALS:					
■ CONTRACTS AFFECTED	3	100	15	40	26
■ % OF CONTRACTS PROCESSED	0.02	0.01	0.01	0.01	0.02
■ LABOR HRS/CONTRACT	8.0	20.0	30.0	30.0	51.9
TOTAL LABOR HRS/FUNCTION	24	2,000	450	1,200	1,333
% TOTAL LABOR HRS (ESTIMATE)	0.03	0.06	0.01	0.04	0.12
18. PROCESS SHIPMENT DISCREPANCIES:					
■ CONTRACTS AFFECTED	0	0	75	200	8
■ % OF CONTRACTS PROCESSED	0.00	0.00	0.06	0.06	0.01
■ LABOR HRS/CONTRACT			2.5	1.0	3.2
TOTAL LABOR HRS/FUNCTION	0	0	188	200	26
% TOTAL LABOR HRS (ESTIMATE)	0.00	0.00	0.01	0.01	0.00
19. TERMINATE FOR CONVENIENCE:					
■ CONTRACTS AFFECTED	0	100	10	18	13
■ % OF CONTRACTS PROCESSED	0.00	0.01	0.01	0.01	0.01
■ LABOR HRS/CONTRACT		15.0	24.0	30.0	17.1
TOTAL LABOR HRS/FUNCTION	0	1,500	240	540	217
% TOTAL LABOR HRS (ESTIMATE)	0.00	0.05	0.01	0.02	0.02
20. TERMINATE FOR CONVENIENCE:					
■ CONTRACTS AFFECTED	1	100	5	12	6
■ % OF CONTRACTS PROCESSED	0.01	0.01	0.00	0.00	0.00
■ LABOR HRS/CONTRACT	24.0	20.0	32.0	20.0	40.4
TOTAL LABOR HRS/FUNCTION	24	2,000	160	240	222
% TOTAL LABOR HRS (ESTIMATE)	0.03	0.06	0.00	0.01	0.02
21. PROCESS BANKRUPTCY/INSOLVENCY:					
■ CONTRACTS AFFECTED	0	0	3	6	3
■ % OF CONTRACTS PROCESSED	0.00	0.00	0.00	0.00	0.00
■ LABOR HRS/CONTRACT			1.0	4.0	5.1
TOTAL LABOR HRS/FUNCTION	0	0	3	24	15
% TOTAL LABOR HRS (ESTIMATE)	0.00	0.00	0.00	0.00	0.00

# LARGE PURCHASE ADMINISTRATION

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# OF CONTRACTS PROCESSED (ESTIMATE)  
# OF LABOR HOURS (ESTIMATE)

NSC DEV %	NRCO AVG	NRCO DEV %	TOTAL HRS	TOTAL DEV %
0.73	5,858	0.87	2,873	1.30
0.70	31,519	0.05	17,834	0.65

## 17. ADMINISTERS CLAIMS/APPEALS:

# CONTRACTS AFFECTED  
% OF CONTRACTS PROCESSED  
# LABOR HRS/CONTRACT  
TOTAL LABOR HRS/FUNCTION  
% TOTAL LABOR HRS (ESTIMATE)

NSC DEV %	NRCO AVG	NRCO DEV %	TOTAL HRS	TOTAL DEV %
0.65	52	0.23	34	0.90
1.00	23.5	0.20	37.7	1.15
1.28	1,217	0.50	1,294	1.62
	0.04		0.07	

## 18. PROCESS SHIPMENT DISCREPANCIES:

# CONTRACTS AFFECTED  
% OF CONTRACTS PROCESSED  
# LABOR HRS/CONTRACT  
TOTAL LABOR HRS/FUNCTION  
% TOTAL LABOR HRS (ESTIMATE)

NSC DEV %	NRCO AVG	NRCO DEV %	TOTAL HRS	TOTAL DEV %
0.71	92	1.80	36	1.91
0.39	1.4	0.53	1.7	0.67
0.84	129	0.73	60	0.80
	0.00		0.00	

## 19. TERMINATE FOR CONVENIENCE:

# CONTRACTS AFFECTED  
% OF CONTRACTS PROCESSED  
# LABOR HRS/CONTRACT  
TOTAL LABOR HRS/FUNCTION  
% TOTAL LABOR HRS (ESTIMATE)

NSC DEV %	NRCO AVG	NRCO DEV %	TOTAL HRS	TOTAL DEV %
0.52	43	0.15	23	0.50
0.57	17.8	0.35	17.6	0.51
0.73	760	0.67	398	0.69
	0.02		0.02	

## 20. TERMINATE FOR CONVENIENCE:

# CONTRACTS AFFECTED  
% OF CONTRACTS PROCESSED  
# LABOR HRS/CONTRACT  
TOTAL LABOR HRS/FUNCTION  
% TOTAL LABOR HRS (ESTIMATE)

NSC DEV %	NRCO AVG	NRCO DEV %	TOTAL HRS	TOTAL DEV %
1.03	39	0.28	17	0.61
0.52	20.5	0.28	24.9	0.70
0.68	800	1.02	415	0.82
	0.03		0.02	

## 21. PROCESS BANKRUPTCY/INSOLVENCY:

# CONTRACTS AFFECTED  
% OF CONTRACTS PROCESSED  
# LABOR HRS/CONTRACT  
TOTAL LABOR HRS/FUNCTION  
% TOTAL LABOR HRS (ESTIMATE)

NSC DEV %	NRCO AVG	NRCO DEV %	TOTAL HRS	TOTAL DEV %
1.51	3	1.97	3	2.62
1.08	3.0	0.50	4.4	1.17
0.54	9	1.29	13	4.21
	0.00		0.00	

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 LARGE PURCHASE ADMINISTRATION  
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	NSC1	NSC2	NSC3	NSC4	NSC5
■ OF CONTRACTS PROCESSED (ESTIMATE)	2,700	660	2,675	1,500	620
■ OF LABOR HOURS (ESTIMATE)	8,119	8,862	26,046	8,062	13,973
22. CLOSES CONTRACTS:					
■ CONTRACTS AFFECTED	700	110	500	227	157
■ % OF CONTRACTS PROCESSED	0.26	0.17	0.19	0.15	0.25
■ LABOR HRS/CONTRACT	0.5	4.0	8.0	5.0	5.1
TOTAL LABOR HRS/FUNCTION	350	440	4,000	1,135	801
■ % TOTAL LABOR HRS (ESTIMATE)	0.04	0.05	0.15	0.14	0.06
23. PREPARES REPORTS:					
■ CONTRACTS AFFECTED	6	200	6	1,500	87
■ % OF CONTRACTS PROCESSED	0.00	0.30	0.00	1.00	0.14
■ LABOR HRS/CONTRACT	1.0	0.5	3.0	0.2	15.7
TOTAL LABOR HRS/FUNCTION	6	100	18	300	1,366
■ % TOTAL LABOR HRS (ESTIMATE)	0.00	0.01	0.00	0.04	0.10
24. SERVICE CONTRACTS:					
■ CONTRACTS AFFECTED	80	90	500	100	109
■ % OF CONTRACTS PROCESSED	0.03	0.14	0.19	0.07	0.18
■ LABOR HRS/CONTRACT	4.0	30.0	15.0	10.0	15.0
TOTAL LABOR HRS/FUNCTION	320	2,700	7,500	1,000	1,635
■ % TOTAL LABOR HRS (ESTIMATE)	0.04	0.30	0.29	0.12	0.12

LARGE PURCHASE ADMINISTRATION

	NSC5	NRCC1	NRCC2	NRCC3	NSC AVG
# OF CONTRACTS PROCESSED (ESTIMATE)	130	13,000	1,273	3,300	1,381
# OF LABOR HOURS (ESTIMATE)	889	32,685	32,624	29,249	10,992
22. CLOSES CONTRACTS:					
# CONTRACTS AFFECTED	50	650	150		291
% OF CONTRACTS PROCESSED	0.38	0.05	0.12	0.00	0.21
# LABOR HRS/CONTRACT	3.0	0.5	2.0		3.9
TOTAL LABOR HRS/FUNCTION	150	325	300	0	1,146
% TOTAL LABOR HRS (ESTIMATE)	0.17	0.01	0.01	0.00	0.10
23. PREPARES REPORTS:					
# CONTRACTS AFFECTED	12	0	230	3,300	302
% OF CONTRACTS PROCESSED	0.09	0.00	0.18	1.00	0.22
# LABOR HRS/CONTRACT	0.5		0.3	1.5	1.0
TOTAL LABOR HRS/FUNCTION	6	0	69	4,950	299
% TOTAL LABOR HRS (ESTIMATE)	0.01	0.00	0.00	0.17	0.03
24. SERVICE CONTRACTS:					
# CONTRACTS AFFECTED	12	0	500	580	149
% OF CONTRACTS PROCESSED	0.09	0.00	0.39	0.18	0.11
# LABOR HRS/CONTRACT	4.0		8.0	5.0	14.8
TOTAL LABOR HRS/FUNCTION	48	0	4,000	2,900	2,201
% TOTAL LABOR HRS (ESTIMATE)	0.05	0.00	0.12	0.10	0.20

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LARGE PURCHASE ADMINISTRATION  
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# OF CONTRACTS PROCESSED (ESTIMATE)	NSC DEV %	NRCC AVG	NRCC DEV %	TOTAL AVG	TOTAL DEV %
# OF LABOR HOURS (ESTIMATE)	0.73 0.70	5,858 31,519	0.87 0.05	2,873 17,834	1.30 0.65
22. CLOSES CONTRACTS:					
# CONTRACTS AFFECTED		400		318	
% OF CONTRACTS PROCESSED	0.37	0.07	0.71	0.11	0.99
# LABOR HRS/CONTRACT	0.58	0.8	0.96	2.9	0.81
TOTAL LABOR HRS/FUNCTION		313		938	
% TOTAL LABOR HRS (ESTIMATE)	0.51	0.01	0.46	0.05	1.19
23. PREPARES REPORTS:					
# CONTRACTS AFFECTED		1,177		593	
% OF CONTRACTS PROCESSED	1.59	0.20	2.17	0.21	1.86
# LABOR HRS/CONTRACT	5.59	1.4	0.42	1.3	3.87
TOTAL LABOR HRS/FUNCTION		1,673		757	
% TOTAL LABOR HRS (ESTIMATE)	1.27	0.05	1.49	0.04	1.31
24. SERVICE CONTRACTS:					
# CONTRACTS AFFECTED		360		219	
% OF CONTRACTS PROCESSED	0.53	0.06	2.61	0.08	1.44
# LABOR HRS/CONTRACT	0.60	6.4	0.23	10.2	0.80
TOTAL LABOR HRS/FUNCTION		2,300		2,234	
% TOTAL LABOR HRS (ESTIMATE)	0.52	0.07	0.73	0.13	0.79



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